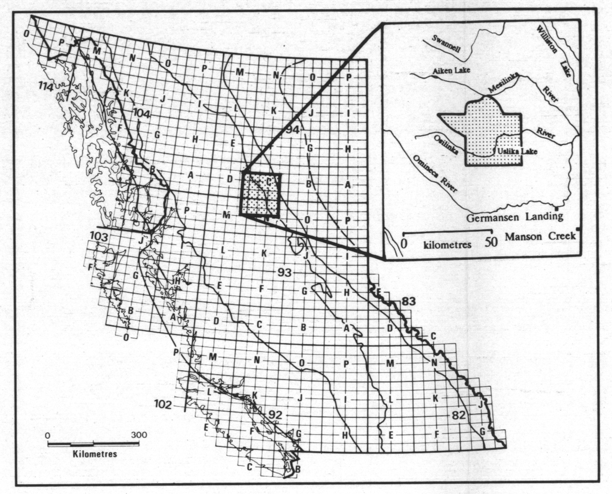

FOSSIL AGES

- F_1 Belemnite cast(?) near Vega Creek. Roots (1954), p. 162.
- F_2 Ammonite; Sinemurian (Lower Jurassic). Roots (1954), p. 162.
- F_3 Plant fossils; Late Lower Cretaceous to Early Tertiary, though the bulk of the data suggests an Upper Cretaceous to Lower Tertiary age. Roots (1954), p. 192.
- F_4 Poorly preserved plant fossils, age indeterminate.
- F_5 Plant fossils; Mesozoic or Cenozoic. E. McIver, Personal Communication, 1991.
- F_6 Poorly preserved plant fossils; age indeterminate.
- F_7 Plant fossils; Mesozoic; Jurassic or Cretaceous, suggestions that they are equivalent to Late Jurassic or Early Cretaceous faunas. E. McIver, Personal Communication, 1991.
- F_8 Fragmentary fossil remains of Paleozoic age. Roots (1954), p. 118.
- F_9 Conodont, Permian. M. Orchard, Personal Communication, 1991.
- F_{10} Archaeocyathids; Lower Cambrian; Roots (1954), p. 89.
- F_{11} Most likely a coral of Silurian-Devonian age. Roots (1954), p. 89.
  Archaeocyathids stratigraphically below F_{11}; Lower Cambrian. Roots (1954), p. 89.
- F_{12} Graptolites; Middle Ordovician. B.S. Norford, Personal Communication, 1991.
- F_{13} Belemnites, nautiloids; Upper Triassic. J.A. Jeletzky, Personal Communication, 1975.

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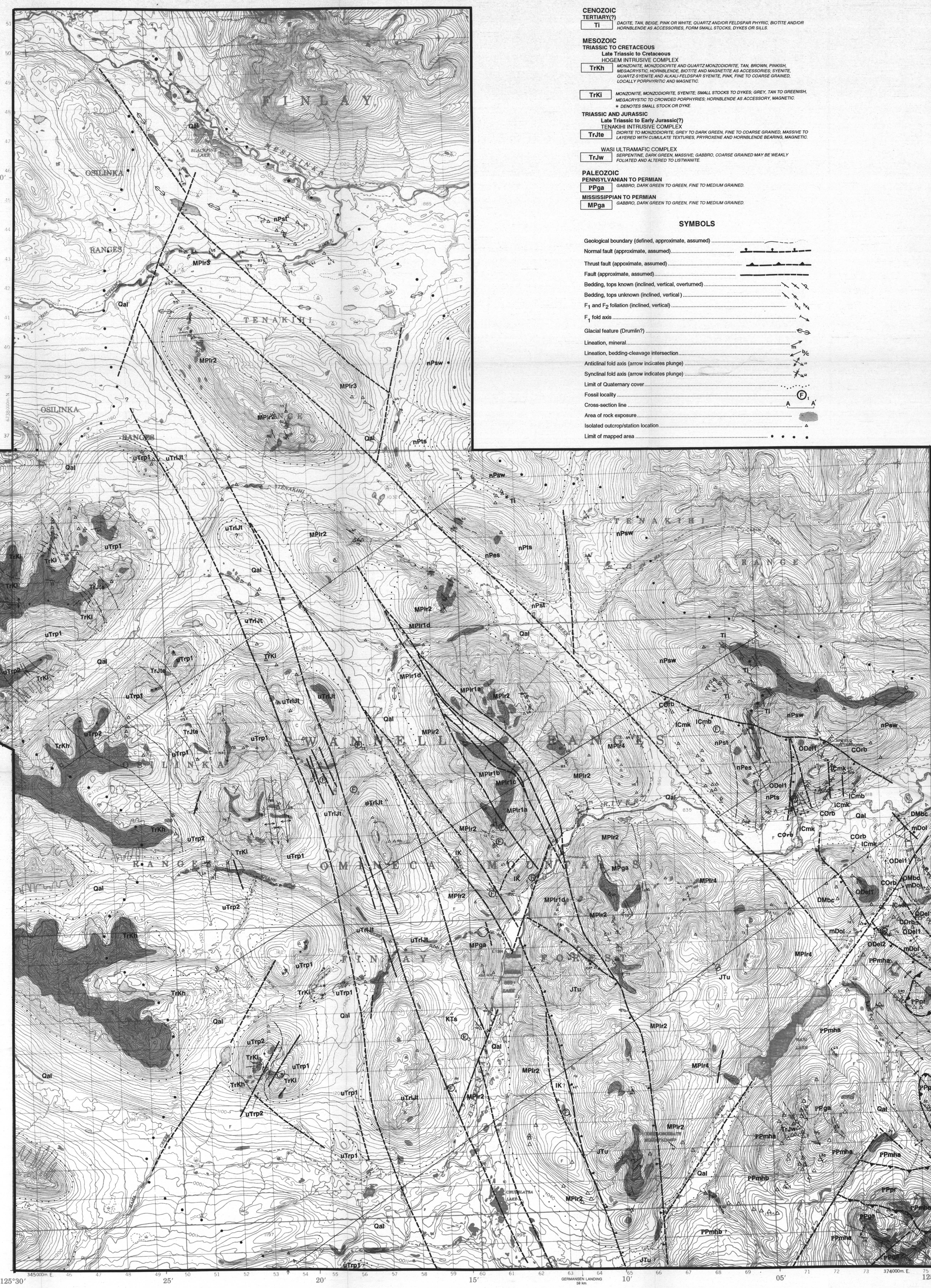
Gabrielse, H. (1975): Geology of Fort Grahame E1/2 Map-Area, British Columbia; *Geological Survey of Canada*, Paper 75-33, 28 pages.

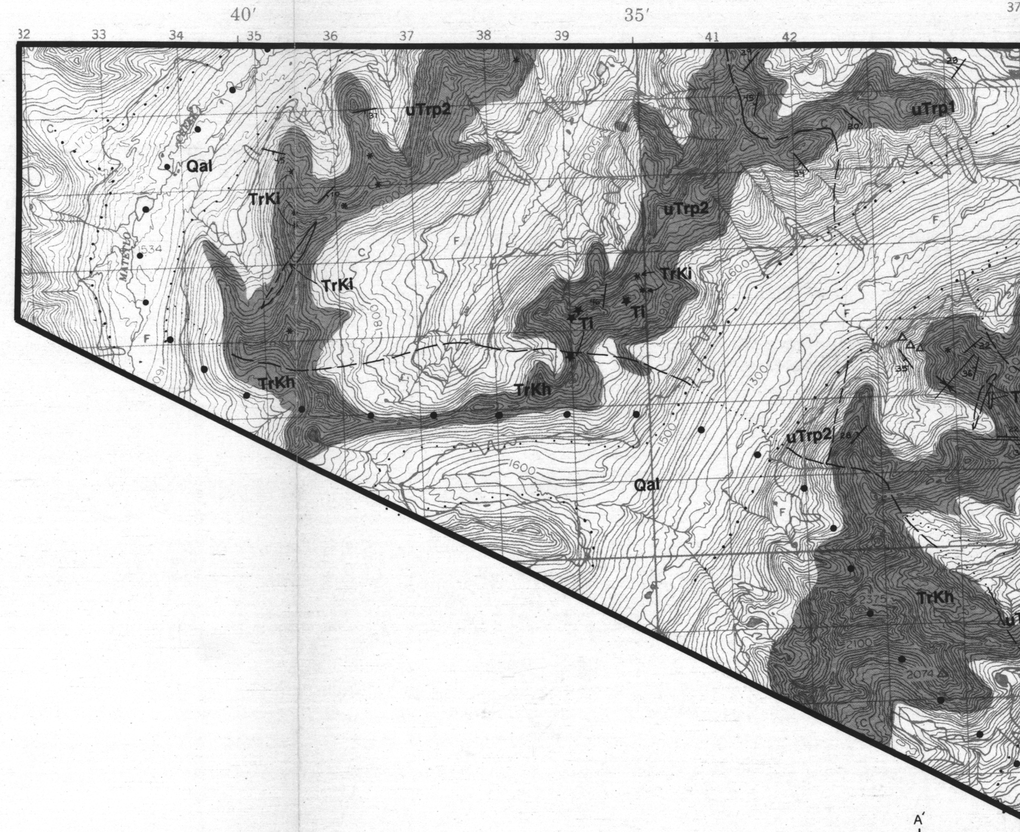
Roots, E. F. (1954): Geology and Mineral Deposits of Aiken Lake Map-area, British Columbia; *Geological Survey of Canada*, Memoir 274, 246 pages.

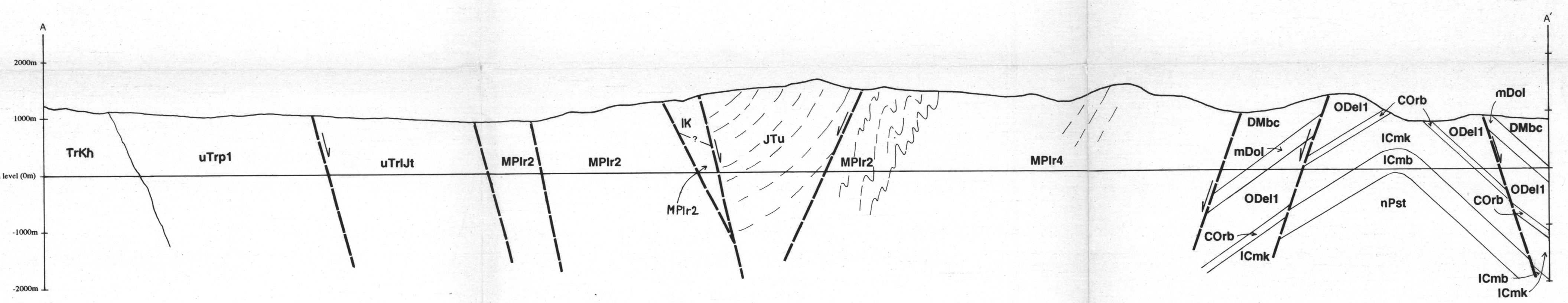
94 C/5	94 C/6	94 C/7
94 C/4	94 C/3	94 C/2
94 N/13	94 N/14	94 N/15

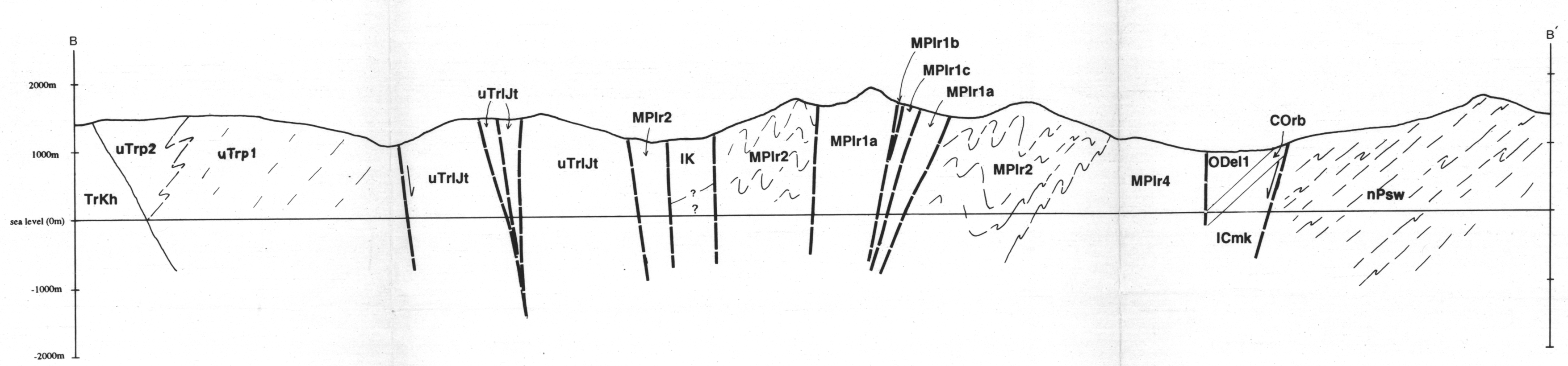
ELEVATIONS IN METRES ABOVE MEAN SEA LEVEL
CONTOUR INTERVAL .... 20 METRES
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

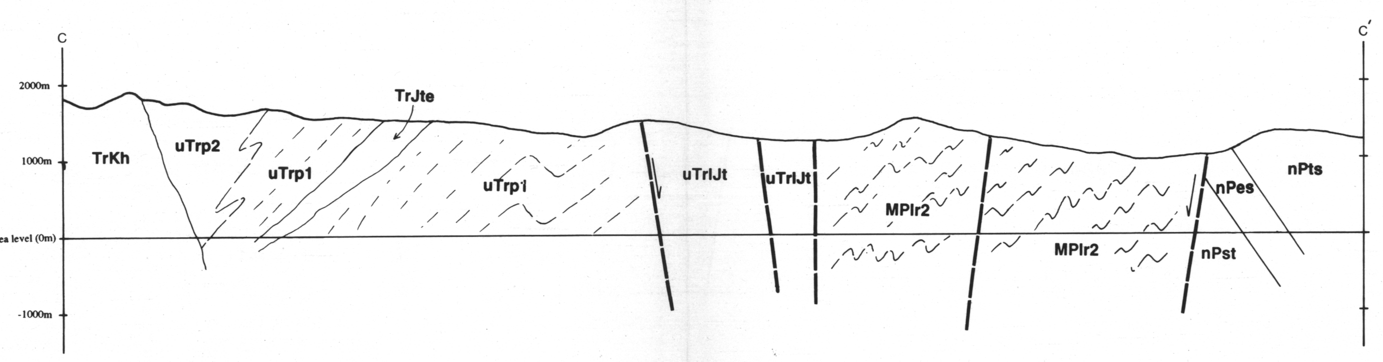
ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 10
QUADRILLAGE DE MILLE MÈTRES
TRANSVERSE UNIVERSEL DE MERCATOR

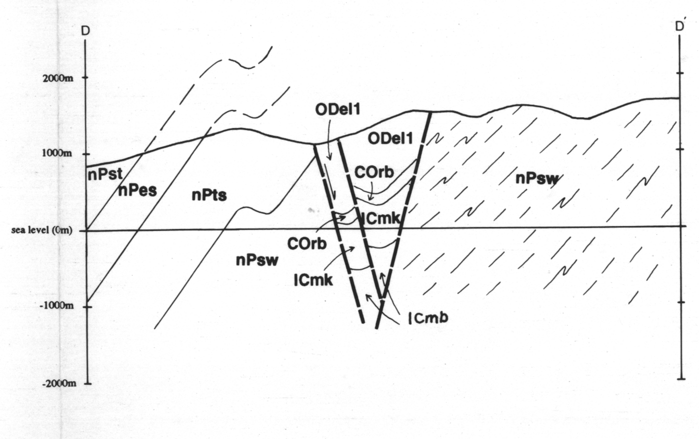












INTRUSIVE ROCKS

CENOZOIC
TERTIARY(?)

Ti — DACITE, TAN, BEIGE, PINK OR WHITE, QUARTZ AND/OR FELDSPAR PHYRIC, BIOTITE AND/OR HORNBLENDE AS ACCESSORIES, FORM SMALL STOCKS, DYKES OR SILLS.

MESOZOIC
TRIASSIC TO CRETACEOUS
Late Triassic to Cretaceous
HOGEM INTRUSIVE COMPLEX

TrKh — MONZONITE, MONZODIORITE AND QUARTZ MONZODIORITE, TAN, BROWN, PINKISH, MEGACRYSTIC, HORNBLENDE, BIOTITE AND MAGNETITE AS ACCESSORIES; SYENITE, QUARTZ-SYENITE AND ALKALI-FELDSPAR SYENITE, PINK, FINE TO COARSE GRAINED, LOCALLY PORPHYRITIC AND MAGNETIC.

TrKi — MONZONITE, MONZODIORITE, SYENITE; SMALL STOCKS TO DYKES; GREY, TAN TO GREENISH, MEGACRYSTIC TO CROWDED PORPHYRIES; HORNBLENDE AS ACCESSORY, MAGNETIC.
* DENOTES SMALL STOCK OR DYKE.

TRIASSIC AND JURASSIC
Late Triassic to Early Jurassic(?)
TENAKIHI INTRUSIVE COMPLEX

TrJte — DIORITE TO MONZODIORITE, GREY TO DARK GREEN, FINE TO COARSE GRAINED, MASSIVE TO LAYERED WITH CUMULATE TEXTURES, PYRYOXENE AND HORNBLENDE BEARING, MAGNETIC.

WASI ULTRAMAFIC COMPLEX

TrJw — SERPENTINE, DARK GREEN, MASSIVE; GABBRO, COARSE GRAINED MAY BE WEAKLY FOLIATED AND ALTERED TO LISTWANITE.

PALEOZOIC
PENNSYLVANIAN TO PERMIAN

PPga — GABBRO, DARK GREEN TO GREEN, FINE TO MEDIUM GRAINED.

MISSISSIPPIAN TO PERMIAN

MPga — GABBRO, DARK GREEN TO GREEN, FINE TO MEDIUM GRAINED.

SYMBOLS

- Geological boundary (defined, approximate, assumed)
- Normal fault (approximate, assumed)
- Thrust fault (appoximate, assumed)
- Fault (approximate, assumed)
- Bedding, tops known (inclined, vertical, overturned)
- Bedding, tops unknown (inclined, vertical)
- F_1 and F_2 foliation (inclined, vertical)
- F_1 fold axis
- Glacial feature (Drumlin?)
- Lineation, mineral — m
- Lineation, bedding-cleavage intersection — b/c
- Anticlinal fold axis (arrow indicates plunge) — 10
- Synclinal fold axis (arrow indicates plunge) — 12
- Limit of Quaternary cover
- Fossil locality — F_1
- Cross-section line — A A'
- Area of rock exposure
- Isolated outcrop/station location
- Limit of mapped area

GEOLOGICAL SURVEY BRANCH

OPEN FILE 1992-11

GEOLOGY OF THE USLIKA LAKE AREA, BRITISH COLUMBIA

NTS 94C/3, 4 and 6

FILIPPO FERRI, STEVE DUDKA, CHRIS REES, DAN MELDRUM AND MARCUS WILLSON

CASSIAR LAND DISTRICT
BRITISH COLUMBIA COLOMBIE-BRITANNIQUE

Scale 1:50 000 Échelle
Miles 1 0 1 2 3 Milles
Metres 1000 0 1000 2000 3000 4000 Mètres

(SHEET 1 OF 2)

LAYERED ROCKS

CENOZOIC
QUATERNARY

Qal — AREA OF THICK GLACIAL DEPOSITS.

CENOZOIC AND MESOZOIC
CRETACEOUS AND TERTIARY
Upper Cretaceous to Lower Tertiary
SUSTUT GROUP

KTs — SANDSTONE, CONGLOMERATE AND SILTSTONE, GREY-GREEN TO BROWN OR RED BROWN, THIN TO THICKLY BEDDED AND FRIABLE, ABUNDANT THIN COALY LENSES.

CRETACEOUS
Lower Cretaceous

lK — CONGLOMERATE, PEBBLY; SANDSTONE, GREY-BROWN AND MAROON, NODULAR; ARGILLITE, DARK GREY, MAY CONTAIN THIN COAL LENSES.

JURASSIC TO TERTIARY(?)
Lower Jurassic(?) to Lower Tertiary(?)
USLIKA FORMATION

JTu — CONGLOMERATE, COARSE PEBBLE TO BOULDER; SANDSTONE, GREEN TO GREY-GREEN, MASSIVE TO THICKLY BEDDED.

MESOZOIC
TRIASSIC AND JURASSIC
Upper Triassic to Lower Jurassic
TAKLA GROUP

uTrlJt — BASALT, GREY-BROWN TO MAROON, MASSIVE TO AGGLOMERATIC, APHANITIC, AMYGDALOIDAL TO PLAGIOCLASE, PYROXENE AND OLIVINE(?) PHYRIC, LESSER TUFF AND LAPILLI TUFF CONTAINING MONZONITE CLASTS.

PLUGHAT MOUNTAIN FORMATION

uTrp2 — AUGITE AND AUGITE-PLAGIOCLASE PHYRIC BASALTIC AGGLOMERATE, COARSE LAPILLI TUFF AND LESSER MASSIVE FLOWS, TUFF AND TUFFACEOUS SILTSTONE, GREEN, DARK GREEN, GREY TO GREENISH GREY; ARGILLITE, DARK GREY TO GREY.

uTrp1 — TUFFS, GREY TO GREENISH, MASSIVE TO THICKLY BEDDED; TUFFACEOUS SILTSTONE, GREY-GREEN TO DARK GREY, THIN TO THICKLY BEDDED; ARGILLITE, DARK GREEN TO GREY, THIN TO MODERATELY BEDDED; RARE ARGILLACEOUS LIMESTONE, DARK GREY; LESSER COARSE LAPILLI TUFF AND AGGLOMERATE AS IN uTrp2.

PALEOZOIC
PENNSYLVANIAN AND PERMIAN
NINA CREEK GROUP
PILLOW RIDGE FORMATION

PPpr — BASALT, GREY-GREEN TO GREEN, MASSIVE AND PILLOWED; GABBRO, DARK GREEN, FINE TO MEDIUM GRAINED; ARGILLITE, DARK GREY TO BLACK, WAVY, THIN TO MODERATE BEDDING, MAY BE SILICEOUS; CHERT, GREEN, GREY, CREAM, MODERATELY TO THICKLY BEDDED.

MOUNT HOWELL FORMATION

PPmha — **UPPER PART:** ARGILLITE AND SILICEOUS ARGILLITE, GREY TO DARK GREY, WAVY, THIN TO MODERATELY THICK BEDDING; SILTSTONE, GREY; CHERT, GREY AND CREAM, THIN TO THICKLY BEDDED, MAY BE RIBBONED; MINOR BASALT, GREEN TO GREY-GREEN, MASSIVE TO PILLOWED AND MAY BE AMYGDALOIDAL; THIN GABBRO SILLS, GREEN TO DARK GREEN, FINE TO MEDIUM GRAINED. **LOWER PART:** ARGILLITE AND LESSER CHERTY ARGILLITE, DARK GREY TO BLACK, WAVY, THIN TO MODERATELY THICK BEDDING, MINOR QUARTZ-WACKE, GREY-BROWN, LENSOIDAL.

PPmhb — TUFF, LIGHT-GREY TO GREY, SERICITIC, QUARTZ AND FELDSPAR BEARING.

MISSISSIPPIAN TO PERMIAN
Lower Mississippian(?) to Permian
LAY RANGE ASSEMBLAGE
MAFIC-ULTRAMAFIC UNIT

MPlr1a — BASALT, DARK GREEN, MASSIVE TO PILLOWED AND MAY BE OLIVINE PHYRIC; MINOR CHERT, GREY TO CREAM; GABBRO, FINE TO MEDIUM GRAINED AND RARE SERPENTINE.

MPlr1b — GABBRO, FINE TO VERY COARSE GRAINED, MAY BE FOLIATED TO MYLONITIC.

MPlr1c — SERPENTINE, DARK GREEN, MASSIVE.

MPlr1d — GABBRO, DARK GREEN, FINE TO COARSE GRAINED; AMPHIBOLITE, FOLIATED BASALTS; SERPENTINE.

MAFIC TUFF UNIT

MPlr2 — TUFF AND TUFFACEOUS SILTSTONE, GREEN, THIN TO THICKLY BEDDED, FINE TO VERY FINE GRAINED; INTERLAYERED WITH GREY TO DARK GREY ARGILLACEOUS SILTSTONE, GREY TO CREAM CHERT AND LIMESTONE; LAPILLI TUFFS AND AGGLOMERATE, CLASTS ARE PYROXENE-PLAGIOCLASE PHYRIC BASALTS, MAROON AND GREEN; BASALT, DARK GREEN, MASSIVE AND AMYGDALOIDAL.

ARGILLITE UNIT

MPlr3 — ARGILLITE, SHALE, PHYLLITE, DARK GREY TO BLACK, GRAPHYTIC, MAY BE SILICEOUS; WACKE, QUARTZ-FELDSPAR BEARING, BROWN; QUARTZITE AND IMPURE QUARTZITE, GREY, MASSIVE AND LOCALLY PEBBLY; LIMESTONE AND ARGILLACEOUS LIMESTONE, DARK GREY TO BLACK, LAMINAR AND THINLY BEDDED, FINELY RECRYSTALLIZED AND MAY BE GRAPHITIC.

DACITIC TUFF UNIT

MPlr4 — TUFF, LIGHT GREY, GREY TO DARK GREY, SERICITIC, MASSIVE, QUARTZ AND FELDSPAR BEARING, RARE MICA CLASTS; MINOR QUARTZ-FELDSPAR WACKE AND ARKOSIC SANDSTONE, GREY; RARE CHERT-CHIP BRECCIA.

DEVONIAN AND MISSISSIPPIAN
Upper Devonian to Lower Mississippian
BIG CREEK GROUP

DMbc — SHALE, ARGILLITE AND SILTSTONE, DARK GREY, BLUE-GREY AND BLACK, THIN TO VERY THINLY BEDDED AND PLATY TO WAVY BEDDED.

DEVONIAN
Middle Devonian
OTTER LAKES GROUP

mDol — DOLOMITE AND LIMESTONE, DARK GREY TO GREY, FETID, POORLY BEDDED, LOCALLY FOSSILIFEROUS; DOLOMITE, GREY, MASSIVE.

ORDOVICIAN TO DEVONIAN
Middle Ordovician to Lower Devonian
ECHO LAKE GROUP

ODel1 — DOLOMITE AND LIMESTONE, PALE TO MEDIUM GREY, THIN TO MASSIVELY BEDDED, MEDIUM CRYSTALLINE AND SUGARY, MAY BE BIOCLASTIC, OOLITIC AND CONTAIN CARBONATE BRECCIA HORIZONS, LOCALLY SILICIFIED AND MAY EXHIBIT ALGAL STRUCTURES.

ODel2 — ARGILLITE, DARK GREY, GRAPTOLITIC AND ARGILLACEOUS LIMESTONE, GREY TO DARK GREY, PLANAR BEDDED.

CAMBRIAN AND ORDOVICIAN
RAZOR BACK GROUP

COrb — **UPPER PART:** CALCAREOUS ARGILLITE, ARGILLACEOUS AND DOLOMITIC LIMESTONE, BOTH DARK GREY, THINLY BEDDED. **LOWER PART:** ARGILLITE, SHALE, DARK GREY TO GREY OR SILVERY, THINLY BEDDED, MAY CONTAIN SECTIONS OF SERICITIC PHYLLITE OR SCHIST, WHITE TO GREENISH.

CAMBRIAN
Lower Cambrian
ATAN GROUP
MOUNT KISON FORMATION

lCmk — LIMESTONE, GREY TO WHITE AND MOTTLED, RECRYSTALLIZED, THIN, WAVY INDISTINCT AND DISCONTINUOUS BEDDING, SLIGHTLY ARGILLACEOUS AND MAY BE DOLOMITIZED.

MOUNT BROWN FORMATION

lCmb — SANDSTONE, IMPURE QUARTZITE, GREY-BROWN TO MAROON, MODERATELY TO THICKLY BEDDED, INTERLAYERED WITH SILTSTONE AND PHYLLITE, DARK GREY TO GREY-GREEN, THIN TO THICKLY BEDDED; MINOR LIMESTONE NODULES.

NEO-PROTEROZOIC
INGENIKA GROUP
STELKUZ FORMATION

nPst — PHYLLITE AND SCHIST, MAY BE QUARTZITIC, GREEN-GREY, CRENULATED, IMPURE QUARTZITE; LIMESTONE, WHITE TO BLUISH GREY, CLEAN WITH THIN MICACEOUS PARTINGS; PHYLLITE, SLATE AND SILTSTONE, DARK BLUE-GREY TO BLACK, GRAPHITIC; LOCALLY CONTAINS BIOTITE AND GARNET.

ESPEE FORMATION

nPes — LIMESTONE, LOCALLY DOLOMITIC, DARK GREY, GREY TO WHITE, MOTTLED, THIN TO MODERATELY BEDDED, LOCALLY WHITE MARBLE.

TSAYDIZ FORMATION

nPts — SLATE, PHYLLITE, GREENISH GREY TO GREY, INTERLAYERED WITH LIMESTONE TO CALCAREOUS PHYLLITE, BOTH THINLY BEDDED; LESSER SANDSTONE, SILTSTONE, GREEN-GREY, FELDSPATHIC WACKE; LIMESTONE, BLUE-GREY, IMPURE AND LAMINATED; LOCALLY CONTAINS BIOTITE.

SWANNELL FORMATION

nPsw — QUARTZITE, IMPURE QUARTZITE, GREY TO TAN, THIN TO THICKLY BEDDED INTERLAYERED WITH SCHIST, GARNET-BIOTITE-MUSCOVITE BEARING.

GEOLOGICAL SURVEY BRANCH

OPEN FILE 1992-11

GEOCHEMISTRY AND MINERAL OCCURRENCES OF THE USLIKA LAKE AREA, BRITISH COLUMBIA

NTS 94C/3, 4 and 6

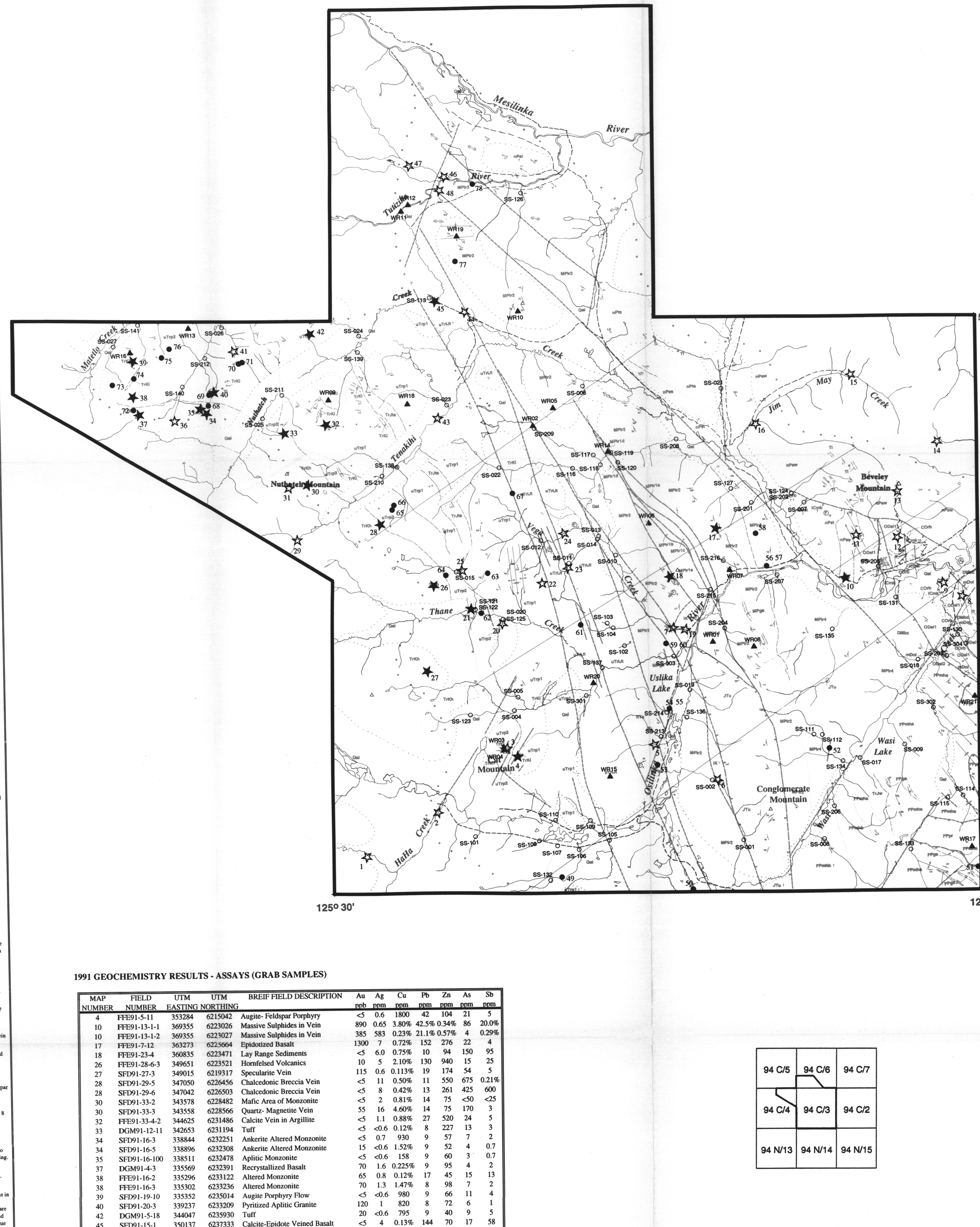
FILIPPO FERRI, STEVE DUDKA, CHRIS REES, DAN MELDRUM AND MARCUS WILLSON

SCALE 1:100 000

(SHEET 2 OF 2)

LEGEND

- Regional Geochemical Survey ○
- Geochemistry - Assay (Grab Sample) ●
- Geochemistry - Whole Rock ▲
- MINFILE Mineral Occurrence ☆
- MINFILE Mineral Occurrence with Coincident Assay Sample ★



ANALYTICAL PROCEDURES FOR GEOCHEMISTRY

ANALYTICAL PROCEDURES FOR ROCK GEOCHEMISTRY

1. GOLD (Au)
Determined by Chemex Labs Ltd., 212 Brooksbank Ave., North Vancouver, B.C., V7J 2C1
Samples were analysed by **Fire Assay - Atomic Absorption Finish**. Detection limit is 5 ppb.

2. BASE METALS (Cu, Pb, Zn, Ag)
Analysis performed by B.C. Geological Survey Branch - Analytical Sciences Laboratory
Samples were analysed by **Multi- Acid Digestion - Atomic Absorption**. Detection limits: Cu - 2 ppm, Pb - 4 ppm, Zn - 2 ppm, Ag - 0.5 ppm.

3. ELEMENTS As, Sb
Analysis performed by B.C. Geological Survey Branch - Analytical Sciences Laboratory
Samples were analysed by **Multi- Acid Digestion - Atomic Absorption-Hydride Generation**. Detection limits: As - 1ppm, Sb - 1 ppm.

ANALYTICAL PROCEDURES FOR STREAM SEDIMENT GEOCHEMISTRY

1. ELEMENTS Au, Ba, Br, Cs, Hf, Na, Rb, Sc, Ta, Th, W, La, Ce, Nd, Sm, Eu, Tb, Yb, Lu
Determined by Activation Laboratories Ltd., 1336 Sandhill Drive, Ancaster, Ontario, L9G 4V5
Samples were analysed by **Multi- Acid Digestion - Neutron Activation**. Detection limits are: Au - 5 ppb, Ba - 50ppm, Br - 0.5ppm, Cs - 0.5ppm, Hf - 1ppm, Na - 0.1%, Rb - 5ppm, Sc - 0.2ppm, Ta - 0.5ppm, Th - 0.2ppm, W - 2ppm, La - 5ppm, Ce - 5ppm, Nd - 5ppm, Sm - 0.2ppm, Eu - 0.2ppm, Tb - 0.5ppm, Yb - 2ppm, Lu - 0.2ppm.

2. ELEMENTS As, Bi, Sb, Cd, Co, Cu, Fe, Pb, Mn, Ni, Ag, Zn, Cr, Hg, Mo, V, Sn
Determined by Barringer Laboratories Ltd., 4200B- 10 Street N.E., Calgary, Alta. T2E 6K3
Samples were analysed using **Atomic Absorption Spectroscopy**. Detection limits are: As - 0.2ppm, Bi - 0.1ppm, Sb - 0.1ppm, Cd - 0.1ppm, Co - 1ppm, Cu - 1ppm, Fe - 0.1%, Pb - 1ppm, Mn - 5ppm, Ni - 1ppm, Ag - 0.1ppm, Zn - 2ppm, Cr - 5ppm, Hg - 5ppb, Mo - 1ppm, V - 5ppm, Sn - 1ppm.

3. FLUORINE (F)
Determined by Barringer Laboratories Ltd., 4200B- 10 Street N.E., Calgary, Alta. T2E 6K3
Samples were analysed using a **Specific Ion Electrode** method. Detection limit is 40 ppm.

4. URANIUM (U)
Determined by Barringer Laboratories Ltd., 4200B- 10 Street N.E., Calgary, Alta. T2E 6K3
Samples were analysed by **Neutron Activation**. Detection limit is 0.2 ppm.

5. LOSS ON IGNITION (LOI)
Determined by Barringer Laboratories Ltd., 4200B- 10 Street N.E., Calgary, Alta. T2E 6K3
Samples were analysed using a **calculation of the Weight Difference** before and after ashing at 500°C. Detection limit is 0.1%.

NOTE: Results for stream sediment samples in **TABLE 2** were determined by *Activation Laboratories Ltd., 1336 Sandhill Drive, Ancaster, Ontario, L9G 4V5*. Analyses were performed by **Neutron Activation**. Detection limits are: Au - 5 ppb, Ba -50ppm, Br -0.5ppm, Cs - 0.5ppm, Hf - 1ppm, Na - 0.1%, Rb - 5ppm, Sc - 0.2ppm, Ta - 0.5ppm, Th - 0.2ppm, W - 2ppm, La - 5ppm, Ce - 5ppm, Nd - 5ppm, Sm - 0.2ppm, Eu - 0.2ppm, Tb - 0.5ppm, Yb - 2ppm, Lu - 0.2ppm, Sb - 0.1ppm, As - 0.5ppm, Cr - 5ppm, Co - 5ppm, Fe - 0.2%, Mo - 1ppm, Ni - 10ppm, Sr - 500ppm, U - 0.2ppm.

MINFILE MINERAL OCCURRENCES

MAP NUMBER	STYLE OF MINERALIZATION	MINFILE NUMBER	OCCURRENCE NAME	COMMODITIES	GEOLOGICAL DESCRIPTION
1	Porphyry	094C 097	REM	Cu, Pb, Ag	Sulphide mineralization includes disseminated chalcopyrite, pyrite, and rare bornite and galena hosted in the Duckling Creek syenite complex within the Upper Jurassic to Lower Cretaceous Hogem intrusive complex.
2	Vein and shear	094C 058	Halfa Creek	Au, Cu	Small quartz veins in sheared quartz diorite carry a small amount of free gold. Chalcopyrite, malachite and pyrite are hosted in a vertical shear zone within the Hogem intrusive complex.
3	Porphyry and vein	094C 069	Cat	Cu, Au, Fe, Ag	The original showings on the ridge top consist of magnetite and pyrite in brownish quartz veins which are host to native copper, native gold, pyrite, chalcopyrite, tetrahedrite and bornite mineralization. Recent work has concentrated on the alkalic Cu-Au porphyry potential of propylitic and potassic altered volcanics of the Takla Gp., in an area located east of the original showings.
4	Porphyry	094C 100	Kiwi	Cu	Malachite staining on fracture surfaces of fragmental augite-feldspar porphyry of the Takla Gp.
5	-	094C 061	Uslika coal	coal	Thin lenses (<1cm- 15cm) of impure silty/sandy lignite to sub-bituminous coal hosted in sandstones and conglomerates of the Sustut Gp.
6	-	094C 101	Energy	coal	Same as #5
7	-	094C 102	Fuel	coal	Same as #5
8	Stratabound carbonate-hosted base metals	094C 103	Critter	Zn, Ba?	Disseminated sphalerite with possible barite found in recrystallized and brecciated sections of light to dark grey dolomite of the Otter Lakes Formation.
9	Stratabound carbonate-hosted base and precious metals	094C 024	Carie/ PAR	Pb, Zn, Ag, Ba	Dolomitized carbonate breccia, possibly of the Espee Fm., hosts disseminated and massive galena, disseminated sphalerite, hydrozincite, and smithsonite with pyrite and barite.
10	Fracture controlled veins	094C 104	Quarry	Pb, Zn, Cu, Au, Sb	Recrystallized and dolomitized limestones of the Espee Fm. host quartz vein mineralization. Minerals identified in hand samples include sphalerite, galena, cerussite, chalcopyrite, boulangerite, malachite, azurite, and possibly stibnite. Fire assays on two grab samples from this location returned values of 890 ppb and 385 ppb Au.
11	Vein/ replacement?	094C 038	Regent	Pb, Ag	An irregular pod-shaped vein of massive crystalline galena is hosted in Espee Fm. dolomite and limestone (assay: 1575g/t Ag, 83.33%Pb).
12	Carbonate-hosted base and precious metals and fracture controlled vein/ replacement	094C 023	Beveley	Pb, Zn, Ag, Ba	[illegible]
13	Shear-controlled quartz vein	094C 105	Gail	Ag, Au, Cu	[illegible]
14	Vein breccia	094C 057	Silver	Ag, Au, Pb, Zn	[illegible]
15	Shear controlled vein breccia	094C 022	Ruby	Au, Ag, Pb, Zn, Mo	[illegible]
16	Placer	094C 026	Jim May Creek	Au	Placer gold occurs in reworked glacial deposits 1.5-3.65m above bedrock and from a buried preglacial channel.
17	Shear controlled vein	094C 106	Range	Au, Cu	[illegible]
18	Shear-vein	094C 107	Surprise	Cu	[illegible]
19	Placer	094C 028	Vega creek	Au	Small placer workings near the mouth of Vega creek.
20	Shear controlled	094C 044	Thane creek	Hg	[illegible]
21	Shear vein	094C 020	Thane	Cu, Fe, Au	[illegible]
22	Cu-Au vein	094C 076	Dave	Cu, Au	[illegible]
23	Shear	094C 043	Bog	Hg, Cu	[illegible]
24	Cu-Au-porphyry/ shear/ vein	094C 021	Vega	Cu, Au, Hg	[illegible]
25	Vein/ shear	094C 019	Pluto	Cu, Au	[illegible]
26	Cu porphyry	094C 108	MJW	Cu	[illegible]
27	Vein	094C 109	Claw	Cu	[illegible]
28	Cu porphyry/ vein	094C 110	Bottle	Cu	[illegible]
29	Vein/ disseminated	094C 072	Gail	Cu, Mo	[illegible]
30	Vein/ porphyry	094C 049	Copper 5	Cu	[illegible]
31	unknown	094C 048	Tenakihi Creek	Cu	[illegible]
32	Vein	094C 111	Snow	Cu	[illegible]
33	Vein	094C 112	DM	Cu	[illegible]
34	Vein	094C 113	Yak	Cu	[illegible]
35	Vein	094C 114	Koala	Cu	[illegible]
36	Vein/ disseminated	094C 018	Manilo	Cu, Au	[illegible]
37	Vein/ disseminated	094C 115	Intrepid	Cu	[illegible]
38	Vein	094C 116	Bill	Cu	[illegible]
39	Disseminated/ porphyry	094C 117	Yes	Cu	[illegible]
40	Disseminated/ porphyry	094C 118	Dragon	Cu	[illegible]
41	Vein/ disseminated	094C 099	Mat 1	Au, Cu	[illegible]
42	Disseminated	094C 119	Tough	Cu	[illegible]
43	Vein/ disseminated	094C 071	Oy	Cu	[illegible]
44	Vein	094C 120	CK	Cu	[illegible]
45	Vein	094C 121	Nuthatch	Cu	Same as #44 except carbonate veining present and flows are locally sheared and fractured. Minor azurite present. Mineralized zone is at least 15 m across.
46	Vein?	094C 015	Stranger	Au	Pyrite occurs in quartz-calcite veins within Permian calcareous black slaty argillite.
47	unknown	094C 041	Mercury 1	Hg	Carbonatized fault zone contains a little cinnabar (in Lay Range volcanics?).
48	unknown	094C 042	Mercury 2	Hg	Same as #47.

1991 GEOCHEMISTRY RESULTS - ASSAYS (GRAB SAMPLES)

MAP NUMBER	FIELD NUMBER	UTM EASTING	UTM NORTHING	BREIF FIELD DESCRIPTION	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
4	FFE91-5-11	353284	6215042	Augite- Feldspar Porphyry	<5	0.6	1800	42	104	21	5
10	FFE91-13-1-1	369355	6223026	Massive Sulphides in Vein	890	0.65	3.80%	42.5%	0.34%	86	20.0%
10	FFE91-13-1-2	369355	6223027	Massive Sulphides in Vein	385	583	0.23%	21.1%	0.57%	4	0.29%
17	FFE91-7-12	363273	6225664	Epidotized Basalt	1300	7	0.72%	152	276	22	4
18	FFE91-23-4	360835	6223471	Lay Range Sediments	<5	6.0	0.75%	10	94	150	95
26	FFE91-28-6-3	349651	6223521	Hornfelsed Volcanics	10	5	2.10%	130	940	15	25
27	SFD91-27-3	349015	6219317	Specularite Vein	115	0.6	0.113%	19	174	54	5
28	SFD91-29-5	347050	6226456	Chalcedonic Breccia Vein	<5	11	0.50%	11	550	675	0.21%
28	SFD91-29-6	347042	6226503	Chalcedonic Breccia Vein	<5	8	0.42%	13	261	425	600
30	SFD91-33-2	343578	6228482	Mafic Area of Monzonite	<5	2	0.81%	14	75	<50	<25
30	SFD91-33-3	343558	6228566	Quartz- Magnetite Vein	55	16	4.60%	14	75	170	3
32	FFE91-33-4-2	344625	6231486	Calcite Vein in Argillite	<5	1.1	0.88%	27	520	24	5
33	DGM91-12-11	342653	6231194	Tuff	<5	<0.6	0.12%	8	227	13	3
34	SFD91-16-3	338844	6232251	Ankerite Altered Monzonite	<5	0.7	930	9	57	7	2
34	SFD91-16-5	338896	6232308	Ankerite Altered Monzonite	15	<0.6	1.52%	9	52	4	0.7
35	SFD91-16-100	338511	6232478	Aplitic Monzonite	<5	<0.6	158	9	60	3	0.7
37	DGM91-4-3	335569	6232391	Recrystallized Basalt	70	1.6	0.225%	9	95	4	2
38	FFE91-16-2	335296	6233122	Altered Monzonite	65	0.8	0.12%	17	45	15	13
38	FFE91-16-3	335302	6233236	Altered Monzonite	70	1.3	1.47%	8	98	7	2
39	SFD91-19-10	335352	6235014	Augite Porphyry Flow	<5	<0.6	980	9	66	11	4
40	SFD91-20-3	339237	6233209	Pyritized Aplitic Granite	120	1	820	8	72	6	1
42	DGM91-5-18	344047	6235930	Tuff	20	<0.6	795	9	40	9	5
45	SFD91-15-1	350137	6237333	Calcite-Epidote Veined Basalt	<5	4	0.13%	144	70	17	58
49	DGM91-10-4-1	355058	6209054	Argillite	<5	<0.6	172	5	81	23	2
50	SFD91-8-1	361414	6208191	Ankeritized/ Bleached Siltstone	<5	0.4	51	14	64	40	3
51	SFD91-23-16	375166	6208788	Bleached Andesite? Sill	<5	<0.6	125	6	62	<0.5	<0.5
52	SFD91-11-7	368257	6214769	Rusty/ Sheared Tuff	<5	0.4	8	68	38	16	4
53	SFD91-2-1	359963	6214249	Ankerite Altered Tuff	<5	<0.4	24	64	65	10	5
54	FFE91-3-1A	360581	6216956	Carbonatized Tuffs	<5	<0.4	22	12	74	0.15%	13
55	FFE91-3-1B	360579	6216956	Carbonatized Tuffs	<5	1.2	70	10	111	115	6
56	FFE91-10-9-2A	365605	6223738	Gossanous Vein	<5	0.8	20	78	18	17	5
57	FFE91-10-9-2B	365605	6223738	Gossanous Vein	<5	0.6	6	42	11	9	2
58	FFE91-7-6	365195	6225271	Silicified Tuff	<5	1.4	32	124	28	14	25
59	FFE91-4-3-1	360564	6220162	Rusty and Siliceous Tuff	<5	<0.4	85	10	91	18	5
60	FFE91-4-3-2	360468	6220224	See Above; Brecciated	<5	<0.4	77	10	93	15	4
61	SFD91-5-1	356506	6221283	Ankeritized/ Brecciated Tuff	<5	0.4	22	30	156	45	6
62	DGM91-11-3-2	351722	6222039	Diorite	<5	<0.6	177	3	60	3	<0.5
63	FFE91-26-4-2	352164	6223930	Carbonatized Tuff	<5	<0.6	47	7	50	45	3
64	FFE91-28-7	350086	6223941	Hornfelsed Basalt	<5	<0.6	41	10	45	4	0.6
65	SFD91-29-14	347663	6227188	Silicified Tuff/ Siltstone	<5	<0.6	162	13	69	145	2
66	SFD91-29-17	347741	6227394	Magnetite- Quartz Vein	60	<0.6	690	21	42	225	2
67	SFD91-24-1-1	353506	6227782	Silicified Tuff	<5	<0.6	97	10	34	3	<0.5
68	SFD91-16-6	339068	6232595	Hemititized Fine Grained Granite	<5	<0.6	40	8	60	5	1
69	SFD91-20-1-2	339111	6233165	Hematite altered Augite Porphyry	10	2	750	11	97	46	6
70	FFE91-18-3	340682	6234646	Silicified/ Pyritized Tuffs	<5	<0.6	80	16	77	9	1
71	FFE91-18-4	340758	6234771	Silicified/ Pyritized Tuffs	<5	<0.6	80	9	82	9	0.7
72	DGM91-4-7	335370	6232638	Gossanous Monzonite	<5	<0.6	51	10	25	100	3
73	DGM91-4-13	334439	6233895	Gossanous Porphyry	<5	<0.6	30	4	30	2	<0.5
74	FFE91-16-7	335432	6234102	Syenite Porphyry	<5	<0.6	38	12	44	6	2
75	FFE91-16-17	336875	6235017	Hornfelsed Agglomerate	<5	<0.6	41	8	53	14	3
76	MJW91-6-1	337234	6235467	Rusty Augite Porphyry	35	0.6	167	8	24	9	1
77	FFE91-31-4	351198	6239152	Silicified Tuff	<5	<0.5	55	10	73	14	2
78	SFD91-32-8	352226	6242848	Quartz Vein in Black Phyllite	110	0.7	83	14	12	150	3

1991 WHOLE ROCK GEOCHEMISTRY - TRACE ELEMENTS

MAP NUMBER	FIELD NUMBER	UTM EASTING	UTM NORTHING	FIELD NAME	Cr ppm	Sr ppm	Rb ppm	Zr ppm	Y ppm	Nb ppm	Sn ppm	U ppm	Th ppm	Ta ppm	CuXRF* ppm
WR1	CJR91-8-5	362882	6220132	BASALT	338	70	<10	57	23	<5	<15	<15	<15	<15	46
WR2	DGM91-14-3	354628	6230926	BASALT	115	364	37	93	20	5	<15	<15	<15	<15	116
WR3	FFE91-5-3	352642	6215413	AGGLOMERATE	29	793	79	104	22	<5	<15	<15	<15	<15	40
WR4	FFE91-5-4	352644	6215303	AGGLOMERATE	102	499	65	44	19	<5	<15	<15	<15	<15	59
WR5	FFE91-8-6	355633	6231809	AGGLOMERATE	<10	172	<10	65	18	<5	<15	<15	<15	<15	66
WR6	FFE91-9-4	360025	6226027	BASALT	238	161	<10	64	24	<5	<15	<15	<15	<15	11
WR7	FFE91-10-7	363839	6223575	BASALT	<10	157	<10	95	26	8	16	<15	<15	<15	182
WR8	FFE91-11-14	364884	6219873	AGGLOMERATE	292	160	41	90	19	10	<15	<15	<15	<15	122
WR9	FFE91-33-16	344868	6232658	PORPHYRY	316	461	22	77	20	<5	<15	<15	<15	<15	62
WR10	FFE91-35-7	354103	6236547	GABBRO	<10	115	<10	95	25	6	<15	<15	<15	<15	180
WR11	FFE91-38-1	348687	6241655	BASALT	<10	892	137	56	16	<5	<15	<15	<15	<15	97
WR12	FFE91-38-5	349067	6241990	BASALT	182	558	43	90	21	<5	18	<15	<15	<15	155
WR13	MJW91-6-6	338187	6236399	TUFF	206	282	12	56	19	9	<15	<15	<15	<15	78
WR14	MJW91-10-6-2	358170	6229524	ULTRAMAFIC	2332	55	<10	<20	<10	7	<15	<15	<15	<15	10
WR15	SFD91-2-6	357615	6213804	BASALT	257	234	<10	52	16	<5	<15	<15	<15	<15	89
WR16	SFD91-19-14	335298	6235384	PORPHYRY	199	293	13	44	19	6	<15	<15	<15	<15	98
WR17	SFD91-22-1	374962	6209702	BASALT	212	115	11	140	40	9	<15	<15	<15	<15	48
WR18	SFD91-34-19	348631	6232316	PORPHYRY	84	448	60	113	23	<5	<15	<15	<15	<15	199
WR19	SFD91-35-7	351227	6240365	BASALT	<10	271	<10	81	24	5	18	<15	<15	<15	177
WR20	SFD91-38-12	357050	6218404	BASALT	76	318	33	86	19	8	<15	<15	<15	<15	78
WR21	SFD91-39-2	375390	6217045	GABBRO	<10	399	<10	130	43	7	18	<15	<15	<15	48

*Determined by XRF analytical method.

1991 REGIONAL GEOCHEMICAL SURVEY - STREAM SEDIMENT RESULTS

TABLE 1

[illegible]

*See ANALYTICAL PROCEDURES for methods.

TABLE 2

[illegible]

*Samples analysed by NEUTRON ACTIVATION.