

GEOLOGY OF THE SCUD RIVER AREA, NORTHWESTERN B.C.

NTS 104G/5 and 6
 COMPILED BY
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 GEOLOGY BY
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 SCALE 1:50 000

LEGEND

- QUATERNARY**
 Qal GLACIAL TILL AND ALLUVIUM
- UPPER TRIASSIC**
STURMUNG GROUP
 utv ARGILLITE, SILTSTONE, ARGILLITE
 utv ARGILLITE AND PLAGIOCLASE PHYRIC BASALT AND ANDESITE FLOWS, ANDESITE BRECCIA, LIMESTONE, SILTSTONE AND SUGGESSID TUFF CLASTS
 utp WELL SORTED GREEN PYROXENE CRYSTAL TUFF AND TUFFACEOUS SILTSTONE, PYROXENE PHYRIC BASALT BELLS AND/OR FLOWS
- MIDDLE TO UPPER (?) TRIASSIC**
 mt UNDIFFERENTIATED SEDIMENTARY ROCKS, GRAPHIC ARGILLITE (G), BLACK, RED AND GREEN CHERT (R), GREEN TUFFACEOUS SILTSTONE AND GREY WACKE (W)
- TRIASSIC OR OLDER**
 t UNDIFFERENTIATED VOLCANIC AND SEDIMENTARY ROCKS, METAVOLCANIC ROCKS (TM), WELL SORTED SILTSTONE, SILTSTONE AND ARGILLITE (TS), METAVOLCANIC LIMESTONE (TL)
 m RELATED TO MASSIVE MAFIC METAVOLCANIC ROCKS, AMPHIBOLITE, BOTTLER SCHIST, MEDIUM GRAINED PYROXENITE
- STIKINE ASSEMBLAGE**
 Pum LIMESTONE UNIT, UPPER MEMBER
 Pum LIMESTONE UNIT, LOWER MEMBER
 Pim BIOCALCITIC LIGHT GREY TO BLACK CALCARENITE
 Pim DARK GREY TO BLACK, COARSELY BIOCALCITIC MORTRE (LARGE MASSIVE CORALS COMMON)
 Pau ARGILLITE UNIT
 Pau FINE GRained BEARING ARGILLITE AND SILTSTONE
- PERMIAN OR OLDER**
 st UNDIFFERENTIATED LAMINATED BENIGNIC TUFF AND SILTSTONE, VARIOUS COLOURED CHERT
 stb/bv BAREMENT UNIT
 stb/bv BAREMENT UNIT (B) FOLIATED ARGILLITE, SILTSTONE, CALCAREOUS SILTSTONE AND BIOCALCITIC LIMESTONE (B) FOLIATED, CHLORITE ANDESITE FLOWS AND/OR SILLS, CRYSTALLINE TUFFS
 bva CHLORITE SCHIST MEMBER
 bva LIGHT GREEN CHLORITE SCHIST TO PHYLLITE, MARCH LAPILLI TUFF AND VOLCANIC CONGLOMERATE (B) (B)
 bla LIMESTONE HORIZONS
 bla WHITE TO LIGHT GREEN FOLIATED LIMESTONE IN BOTH BA AND BV
 sla UNDIFFERENTIATED, RECRYSTALLIZED LIMESTONE
- INTRUSIVE ROCKS**
 A- ANDESITE, B- BASALT, P- LIGHT GREY QUARTZ PHYRIC FELSYRIC DIKES
 N- DARK GREEN, PYROXENE PHYRIC OLIVINE BASALT DIKES
- Eocene**
 Egd CHLORITE ALTERED, PLAGIOCLASE PHYRIC GRANODIORITE (AGE UNCERTAIN)
 Egd EQUIGRANULAR, MEDIUM GRAINED HORNBLENDE BOTTE GRANODIORITE
 Egn MEDIUM TO COARSE GRAINED BOTTE GRANITE, MAJOR HORNBLENDE, LOCALLY A FELDSPAR MEGACRYSTIC (M-PN, Egn)
- MIDDLE JURASSIC**
 mJgd EQUIGRANULAR, MEDIUM GRAINED HORNBLENDE BOTTE GRANODIORITE AND QUARTZ MONZONITE (M-PN)
 mJd METACRYSTALLINE, MEDIUM TO COARSE GRAINED QUARTZ DIOXIDE, HORNBLENDE DIOXIDE, HORNBLENDE AND PYROXENITE
- YEHNIKO PLUTON**
 mJgn PINK MEDIUM GRAINED HORNBLENDE BOTTE GRANITE, MAJOR QUARTZ MONZONITE
- EARLY JURASSIC**
 eJgn MEDIUM GRAINED, POTASSIUM FELDSPAR MEGACRYSTIC HORNBLENDE QUARTZ MONZONITE
- MIDDLE-LATE TRIASSIC**
HICKMAN PLUTON
 ITd COARSE GRAINED, PLAGIOCLASE MEGACRYSTIC MAGNETITE BEARING HORNBLENDE QUARTZ DIOXIDE (M-PN, E) (E)
 ITm MAIN PHASE, HETEROGENEOUS QUARTZ MONZONITE, HORNBLENDE BOTTE GRANODIORITE, TONALITE AND QUARTZ DIOXIDE
 ITg MAFIC PHASE, HETEROGENEOUS FINE TO MEDIUM GRAINED HORNBLENDE GABBRO AND HORNBLENDE
- ULTRAMAFIC ROCKS**
 ITga EQUIGRANULAR, MEDIUM GRAINED, MAGNETITE BEARING PYROXENE GABBRO
 IT Medium to coarse-grained olivine clinopyroxenite (ITcx) and diorite (ITdx)
 IT NIGHTOUT PLUTON
 ITgd MEDIUM GRAINED, EQUIGRANULAR BOTTE HORNBLENDE GRANODIORITE AND QUARTZ MONZONITE

SYMBOLS

- Geological boundary (defined, approximate, assumed)
 Unconformity (assumed)
 Bedding (inclined, vertical, parallel to foliation)
 Bedding top observed (inclined, vertical, overturned)
 Bedding, estimated altitude (g = gentle, m = moderate, s = steep)
 Foliation (inclined, vertical, M = mylonite)
 Joint (inclined, vertical)
 Dike (inclined, vertical)
 Vein (inclined, vertical, Q = quartz)
 Angular silt
 Synchronous silt
 Overturned synclinal axis
 Axial plane of minor fold (inclined, vertical)
 Fold axis of minor fold with M, S and Z symmetry; orientation (arrow indicates plunge)
 High-angle fault; surface trace (defined, approximate, assumed)
 Fault (defined, approximate, assumed; teeth in direction of dip)
 Thrust fault (defined, approximate, assumed; teeth in direction of dip)
 Shear zone, mylonite
 Cross-section line
 Geochronological sample location (trace element, major oxide, Table 3 on Sheet 2)
 Potassium-argon isotope age sample location (Table 5 on Sheet 2)
 (N = non-basalt, B = basalt)
 Field station with no structural measurements
 Native peoples stone cairns of archaeological interest

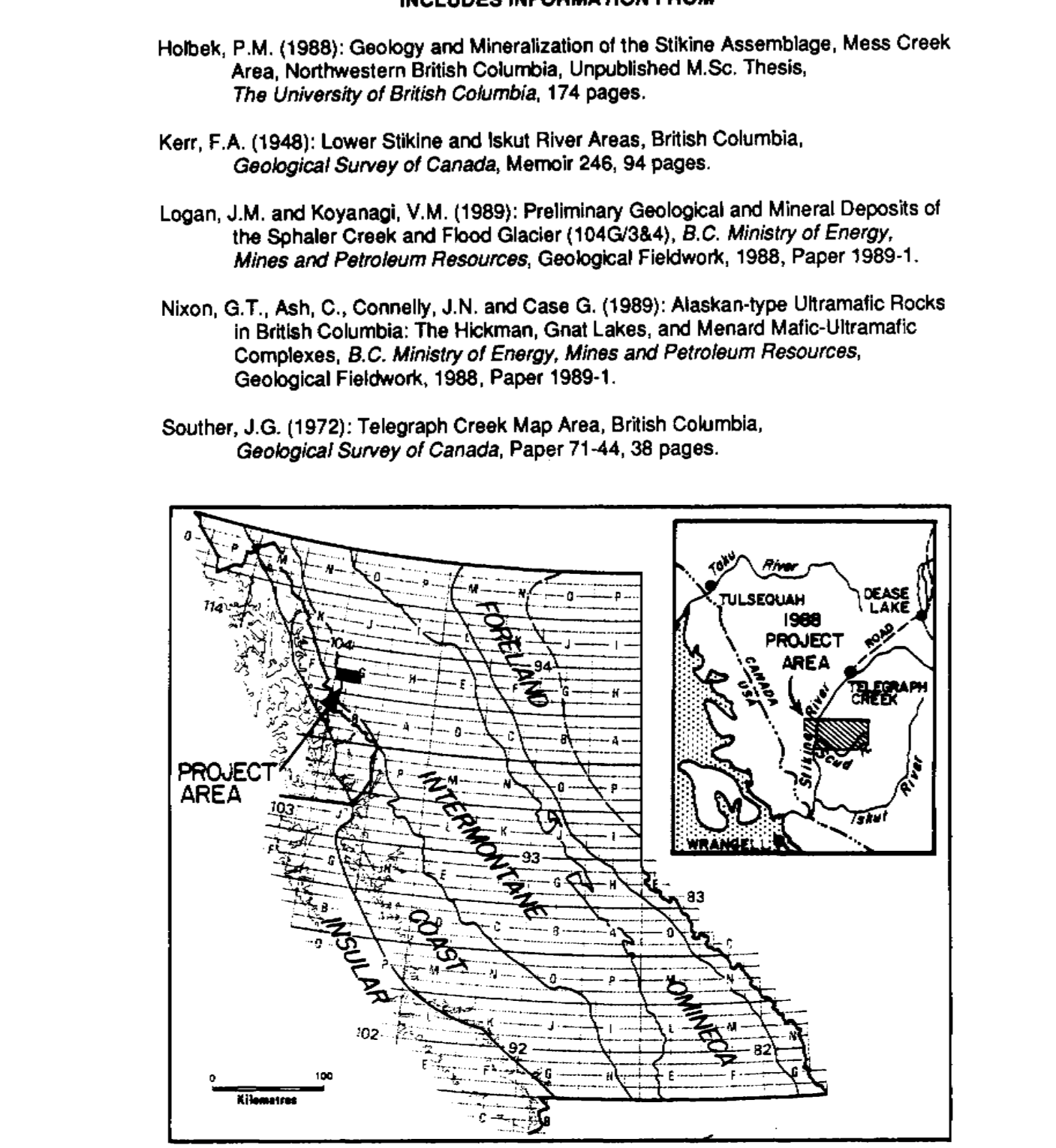
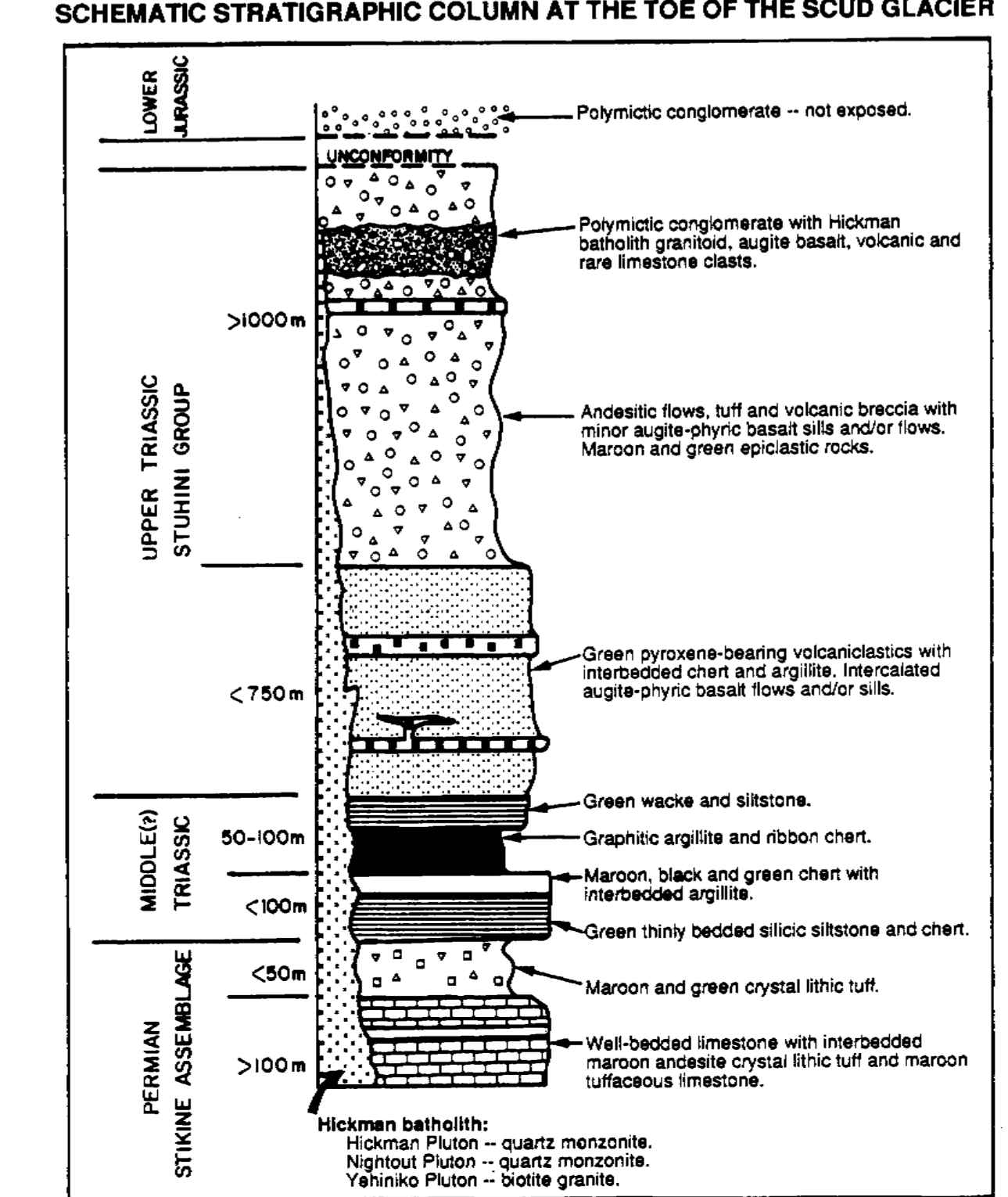
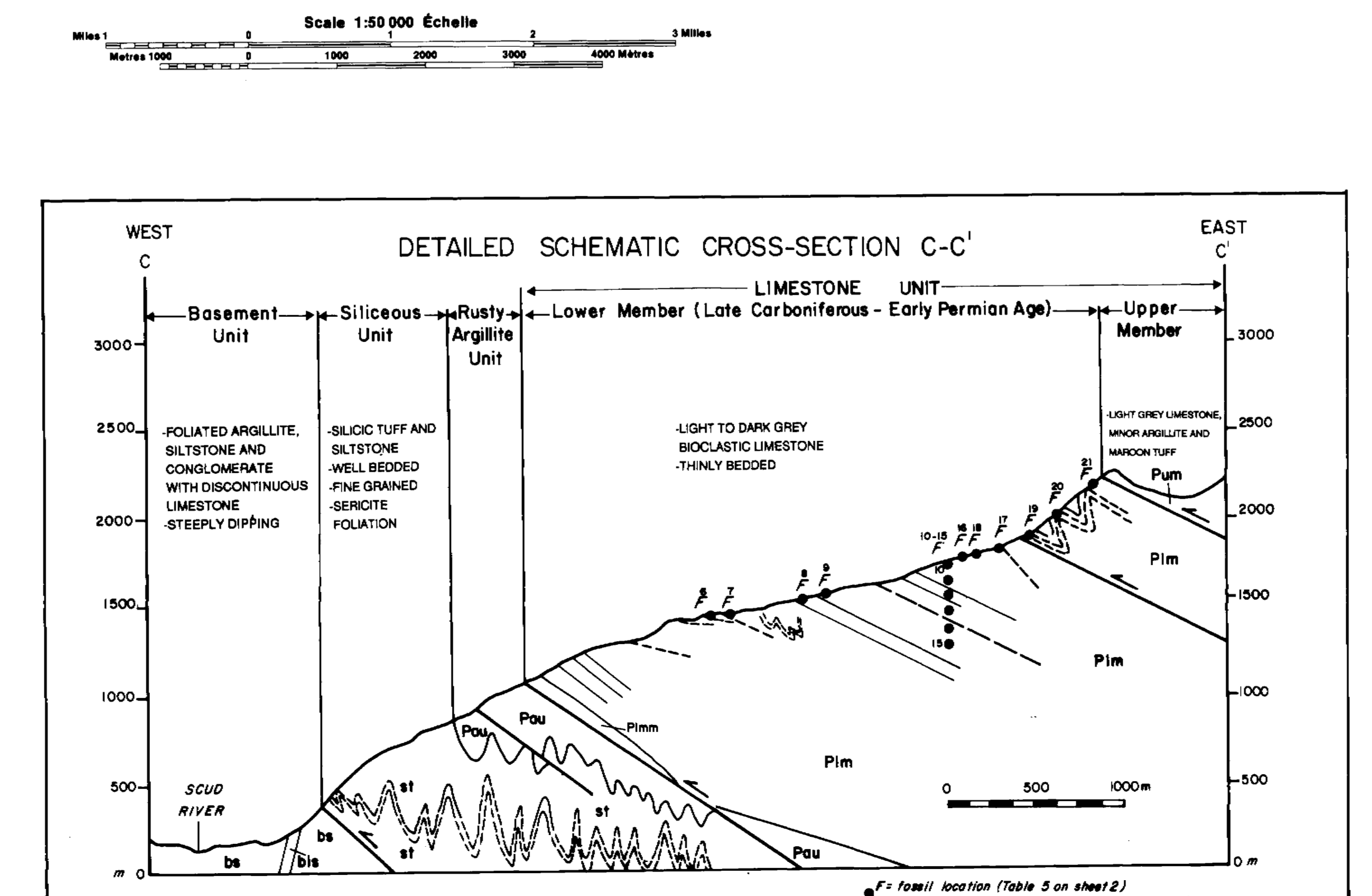
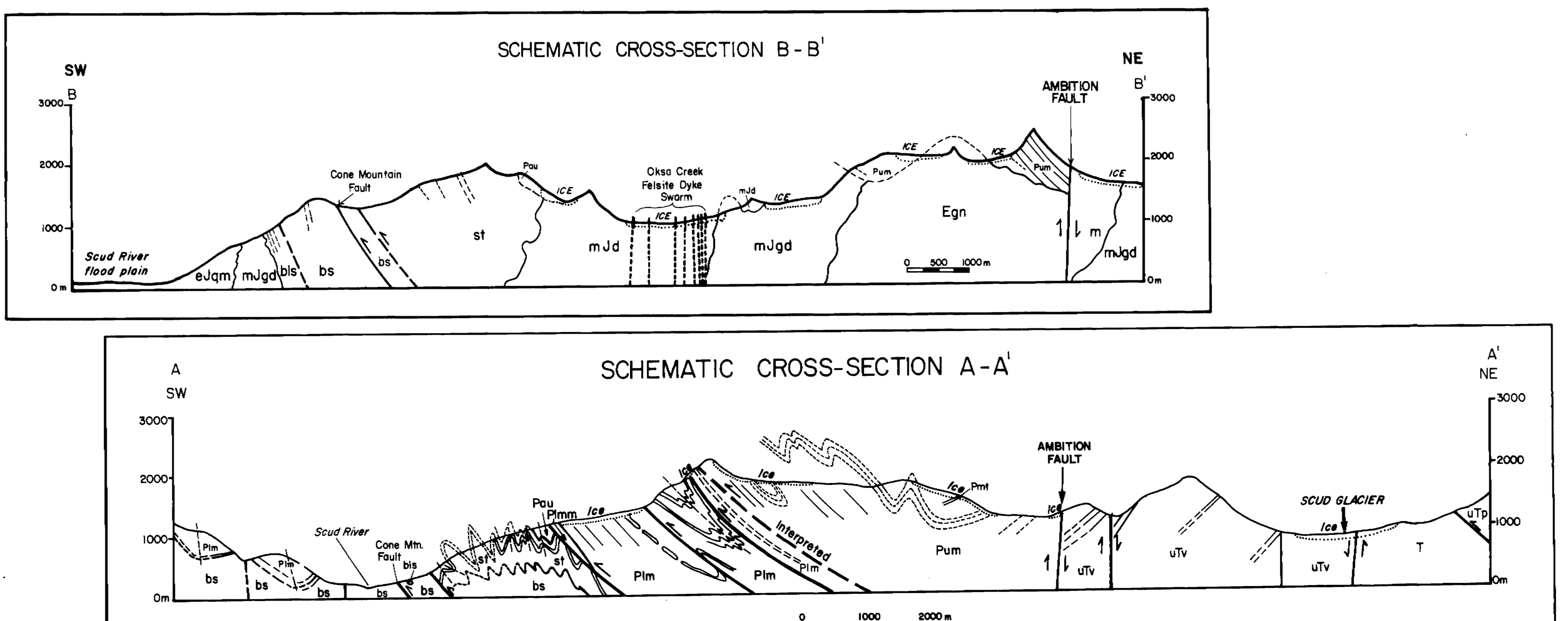


TABLE 1
REGIONAL STREAM SEDIMENT SAMPLE PERCENTILES FOR SELECTED ROCK UNITS
IN THE ISKUT, SUMDUM, TELEGRAPH CREEK AND TULSEQUAH MAP AREAS (104G, F, G AND K)

Rock Unit	Percentile	Cu	Ag	Pb	Zn	Ni	Co	Mo	W	F	U	As	Sb	Hg	Ba
STLHMH (n=53)	75%	88	14	0.3	14	120	41	20	3	4	3	380	3.1	21	1.6
	95%	137	103	0.6	32	227	91	30	6	8	530	8.2	64	4.6	220
STKME (n=327)	75%	76	15	0.2	11	92	38	17	3	3	420	3.4	18	1.0	30
	95%	125	72	0.2	27	152	92	25	6	13	520	13.2	63	4.5	110
INTRUSIONS (n=410)	75%	54	11	0.2	13	80	21	14	3	3	430	10.8	6	0.5	25
	95%	143	65	0.5	41	146	55	24	8	8	630	29.2	34	1.4	55

Note: Data from the Regional Geochemical Survey for Iskut, Sumdum, Telegraph Creek and Tulsequah map areas (104G, F, G and K) were sorted on rock codes for the three rock units. The assigned rock unit is determined by the lithology at the stream sediment sample site (based on 1:100,000 geology map) and may not necessarily reflect the source lithology for that sample.

TABLE 2
1988 STREAM SEDIMENT GEMOLOGY FOR THE SCUD GLACIER AND SCUD RIVER MAP AREAS (104G/5 AND 6)

Map No.	UTM (Zone 09) Easting	UTM (Zone 09) Northing	Rock Code	Cu	Ag	Pb	Zn	Ni	Co	Mo	W	F	U	As	Sb	Hg	Ba
STHUNK GROUP (n=5)																	
871053	37221	634739	uTv	71	1	0.4	40	94	264	25	4	8	2	190	0.8	90	2.4
871050	379122	6352893	uTv	86	1	0.1	8	72	106	28	2	2	2	135	0.9	4	0.3
871021	36918	6274460	uTv	125	1	0.2	12	116	26	12	2	2	2	150	2.2	17	0.2
873262	365496	6355086	uTv	43	0.1	7	40	18	11	1	2	2	2	285	1.9	0.8	5
873369	360244	6349182	uTv	35	10	0.2	11	54	52	13	1	2	2	225	1.1	87	5.3
STHUNK ASSEMBLAGE (n=31)																	
871133	33881	638978	CpAn	58	12	0.1	4	61	52	17	1	1	2	335	1.5	9	0.3
871134	33887	637081	CpAn	19	6	0.1	6	42	12	10	1	1	2	300	5.5	2	0.1
871135	335021	637282	CpAn	41	1	0.1	9	53	29	13	1	2	2	120	2.0	5	0.5
871137	334213	637125	CpAn	31	22	0.8	23	90	15	8	10	1	2	325	28.8	9	0.7
871138	332960	637018	CpAn	1	1	0.2	2	18	2	2	2	2	2	160	18.6	1	0.2
872023	341128	637468	CpAn	11	0.1	15	3	29	2	2	2	2	2	200	2.8	0.6	20
872064	340476	6374018	CpAn	83	2	0.1	7	67	52	20	1	2	2	300	2.1	9	0.4
872068	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872069	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872070	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872071	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872072	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872073	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872074	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872075	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872076	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872077	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872078	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872079	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872080	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872081	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872082	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
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872091	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872092	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
872093	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
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872098	340079	6350684	CpAn	55	1	0.1	1	20	2	2	2	2	2	255	1.5	6	0.5
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