

ERCL REPORT

BC. RECON - 1983

BRITISH COLUMBIA

BITUMINOUS RECONNAISSANCE PROGRAM

~~ISKUT~~ - 1983

APPENDIX I, II and IV

~~NOTS~~ 104 H-3

BERG, TAMAKI, PEACH

795

ERCL REPORT

BRITISH COLUMBIA

BITUMINOUS RECONNAISSANCE PROGRAM - 1983

BC RECON-1983

ISKUT

NTS 104H-3

OPEN FILE

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October 28, 1983

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ABSTRACT

The Bowser Basin located in northwest British Columbia contains a Middle Jurassic to Lower Cretaceous series of marine, littoral-paralic, fluvial, alluvial, and deltaic sediments. It was postulated that coals would be found in a transitional (i.e., littoral-paralic) setting, therefore, the exploration program entailed mapping paleoenvironmental and depositional facies trends.

Mapping led to the discovery of coal in a fluvial channel-overbank series and the paralic zone, both of which are thought to be the equivalent to the Lower Cretaceous Jenkins Creek Facies.

The fluvial occurrences were dominated by finding upward channel sequences of conglomerate, sandstone, siltstone and coal and a finer grained overbank assemblage of sandstone, siltstone, shale and coal. The seams were very shaley and thin (< .5 m) in both cases.

The paralic facies contained clean, hard coal in a darker coloured dominately finer grained stratigraphy of sandstone, siltstone and mudstone. Seams are locally concentrated and tentative correlations suggest there are eight seams averaging 1.0 metres with the thickest being 3.41 metres.

Due to the nature of the occurrences of these paralic coals, and the current marketability of anthracite, a license area, "Sweeny", has been delineated and is recommended for acquisition.

INTRODUCTION

The 1983 Iskut Reconnaissance program was located in the Bowser Basin of northwest British Columbia, a large structurally and stratigraphically complex successor basin ranging in age from Middle Jurassic to Lower Cretaceous. Numerous coal occurrences east of the Nass River were reported by Dowling (1915) in the early part of the century, hence a great deal of exploration activity has centered around these findings. The coals found previously, occur in two depositional environments:

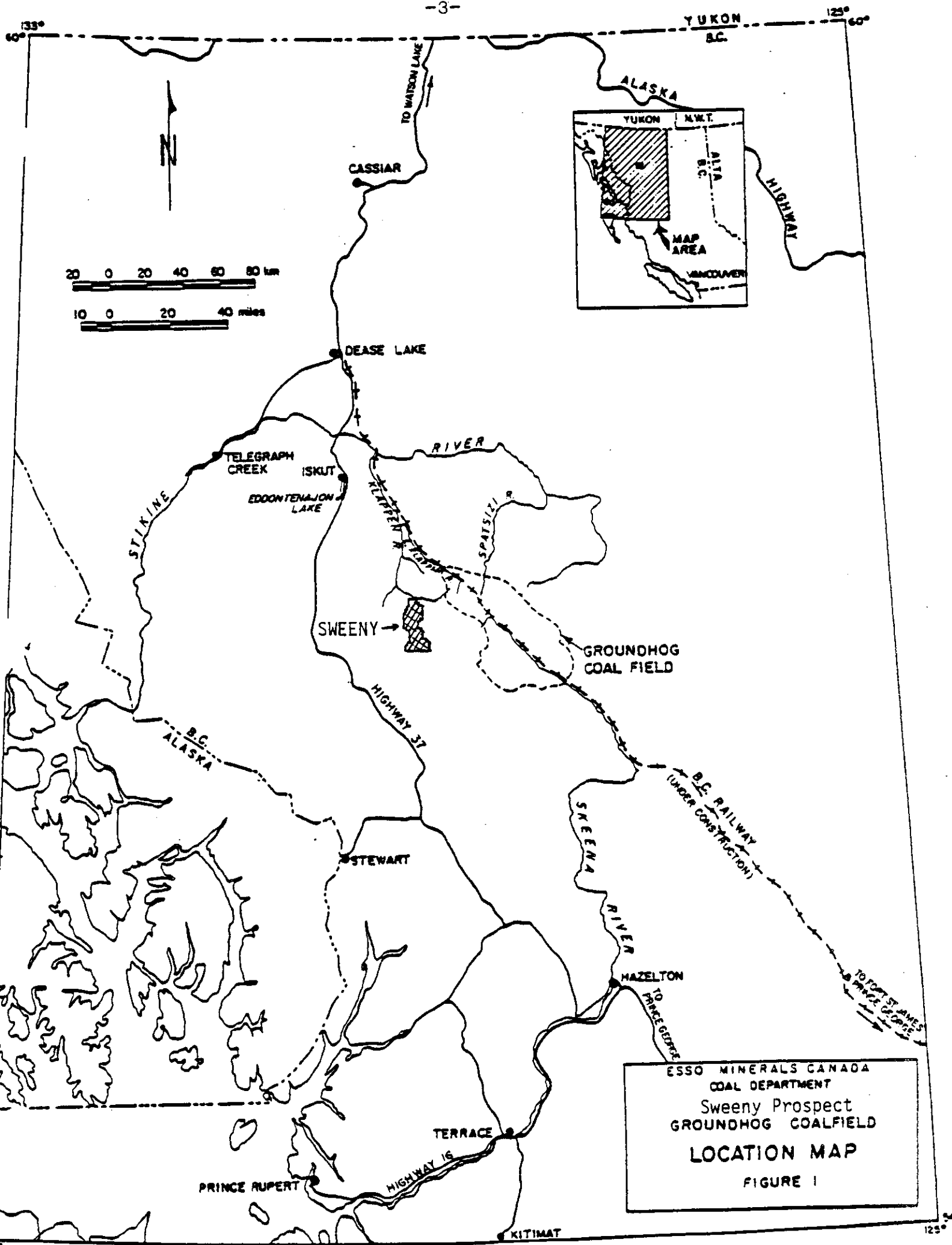
- 1) a prograding pro-delta - delta sequence as described by Eisbacher (1973) and named the Duti River - Slangeesh Facies.

and

- 2) an alluvial fan - coal swamp assemblage known as the Groundhog - Gunanoot Facies (Eisbacher, 1973).

The purpose of this year's study was to delineate other coal bearing stratigraphy in areas outside of those previously mentioned. This was done by regionally outlining the depositional facies boundaries of marine, transitional and continental sediments which occur in the sedimentary basin. Coal was postulated to occur in the transition zone where coastal bog and swamp conditions created extensive paralic coal deposits which were preserved by progradation of the shoreline. As the regional extent and general stratigraphy of each facies became apparent, concentration on this transitional facies was undertaken.

A temporary camp was located on Hiway #37 at Skowill Creek, approximately 79 kilometres north of the Stewart turnoff at Meziadin Junction (Figure 1). The camp was in operation from June 7, until September 7. Personnel included four Esso geologists, two Highland Helicopter employees and a cook. Expediting services were conducted by Aero Expediting out of Smithers via Hiway #37.



The 1983 Bituminous Reconnaissance Iskut operating expenditures was \$175,000 and is broken down as follows:

ISKUT OPERATING COSTS - TABLE I

<u>ITEM/SERVICE</u>	<u>COST</u>
Helicopter Contract	87,000.00
Helicopter Fuel	19,747.49
Vehicle Rental	11,605.48
Food	8,136.54
Fuel	3,128.73
Accommodation	2,174.75
Field & Office Supplies	19,172.48
Contractor Services	11,729.15
Camp Rentals	1,034.20
Camp Purchases	1,805.00
Communication	1,000.00
Cargo	2,200.00
Propane	200.00
Employee Expenses	<u>6,066.18</u>
	<u>\$175,000.00</u>

REGIONAL GEOLOGY

The Bowser Basin lies within the Intermontane Belt of British Columbia and is bounded by the Omineca Crystalline Belt to the east, the Stikine Arch to the north, the Skeena Arch to the south and the Coast Plutonic Complex to the west. The genesis and tectonics of these four geological domains has influenced the basinal outline, structure and sedimentation of the Bowser Group sediments.

The first sediments deposited were the Middle to Upper Jurassic, Duti-Slamgeesh Facies (Eisbacher, 1973); a marine, prodelta-delta assemblage derived from the flanking continent and deposited on the eastern border of the basin. At the same time sediments to the west were shed off an island arc system in the eastern Pacific (Kerr, 1948) and formed the littoral and marginal continental marine deposits of the Salmon River Formation (Grove, 1982). Both unconformably overlie the eugeosynclinal volcanics and sediments of the Early Mesozoic Takla - Hazelton Groups. In the Upper Jurassic, the Stikine Arch began to rise contributing coarse clastics south (Gabrielse & Wheeler, 1960) causing the beginning of the marine regression to the southwest. In the Upper Jurassic to Lower Cretaceous the continental deposits of the Nass River Formation (Grove, 1982) and the Groundhog-Gunanoot Facies (Eisbacher, 1973) were being deposited on the western and eastern borders of the basin respectively. Deposition of the Nass River Formation though, was halted before the end of the Lower Cretaceous due to deformation of the Takla-Hazelton Group and the Salmon River Formation to the west and northwest by the advance of the Pacific Orogeny eastwards. This disturbance progressed slowly eastward as the alluvial deposits of the Groundhog-Gunanoot Facies graded into the fluvial Jenkins Creek Formation, forming on the eastern edge and centre of the basin. Figures II, III and IV illustrate the distribution, tentative correlations and sedimentary relationships of these deposits respectively.

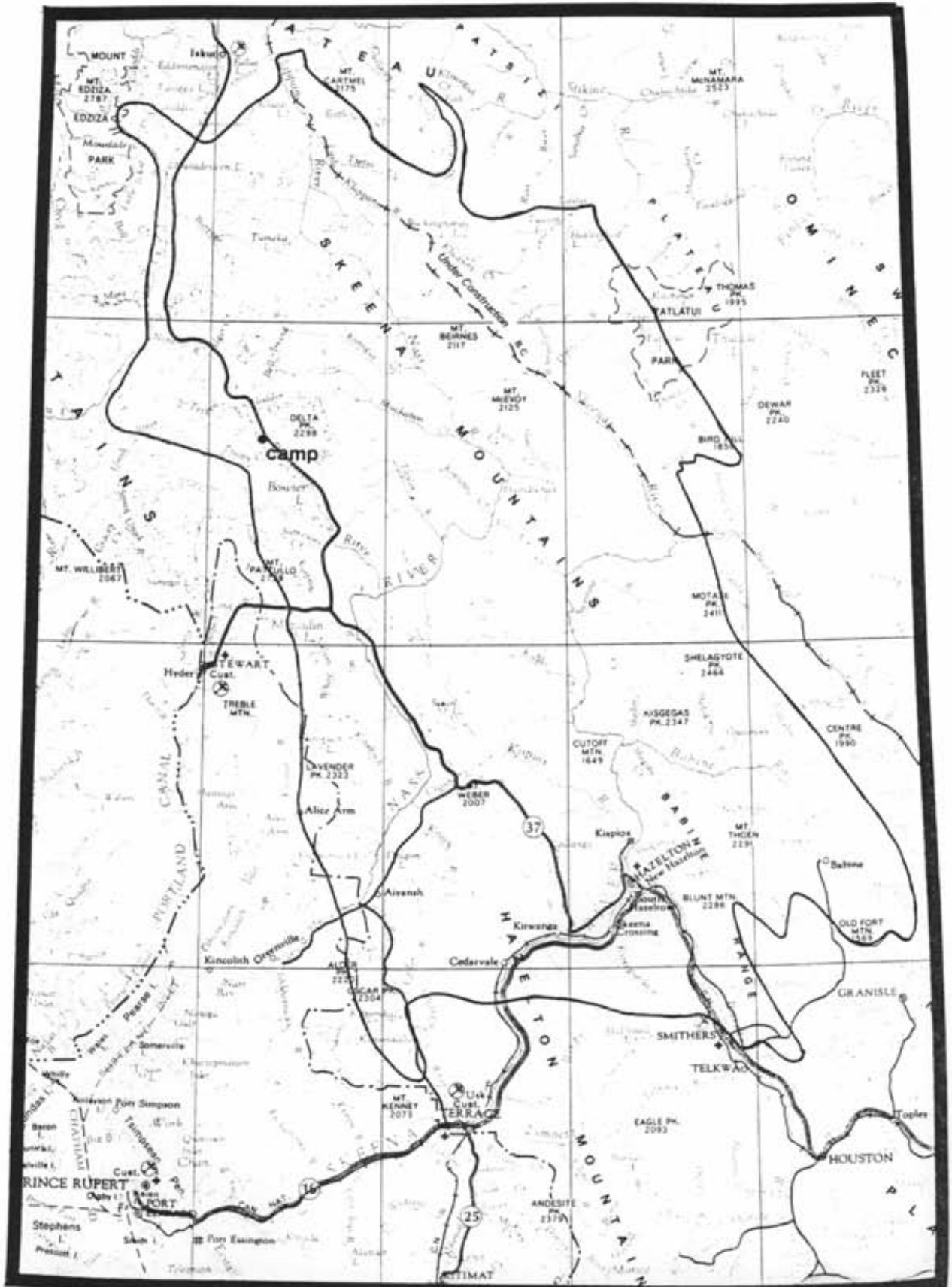
The rising of the Columbian Orogen to the east in the upper Lower Cretaceous caused the basinal inland sea to withdraw further to the southwest. The departure of this sea created smaller and younger sedimentary basins to the southeast towards Kispiox, Telkwa, Driftwood River, Smithers and Zymoetz. During the regression, a hiatus in deposition occurred until the lower Upper

Cretaceous Columbian Orogeny began to the east. This tectonic activity contributed clastics for the westerly flowing braided and meandering stream deposits of the Sustet Group's Tango Creek Formation which lies unconformably on the eastern Bowser Group sediments (Eisbacher, 1970).

The Pacific Orogen continued its advancement eastwards throughout the Cretaceous and by the Early Cenozoic the rising land was a source area for alluvial fans of the Eocene Brothers Peak Formation of the Sustet Group. The orogeny continued into the Paleocene (Eisbacher, 1973) halting Brothers Peak deposition and faulting the Bowser assemblage up onto the eastern margin of the Sustet Group.

Subsequent tensional stresses resulted in volcanic plugs and plateau basalts being extruded throughout the Tertiary with quiescent volcanic activity continuing into the Holocene, particularly in the vicinity of Mt. Edziza.

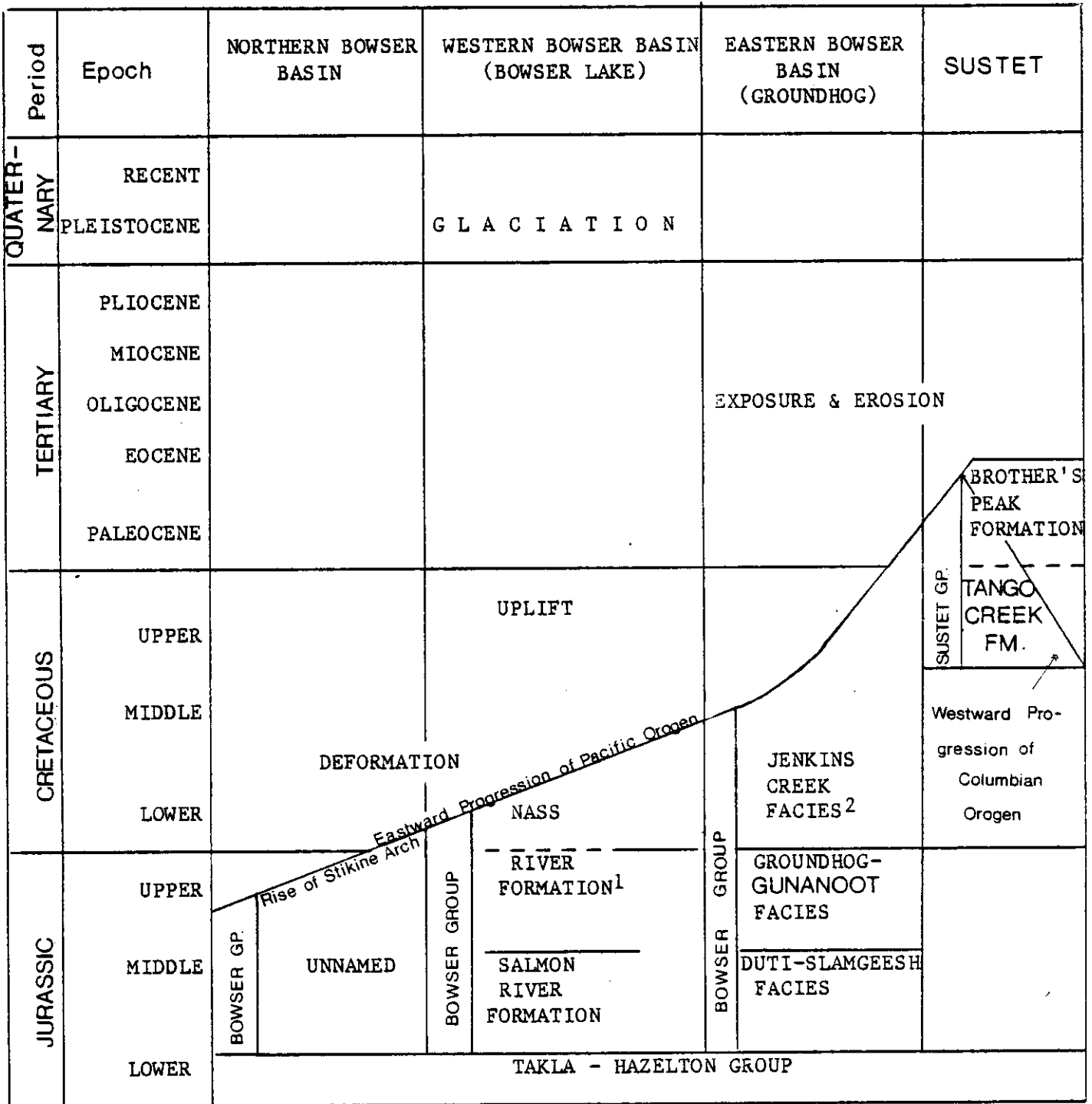
Based on this sedimentary and tectonic history, a decision was made to isolate the transitional zone between the marine and fluvial facies in an effort to find those coals occurring in paralic environments. Even though the basin has undergone considerable structural readjustment, spacial reconstruction of the original depositional relationships allows correct positioning of the three zones (Figure V) as crustal shortening is on the order of only 20% (Eisbacher, 1974).



Distribution of Bowser Basin Sediments

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Figure II

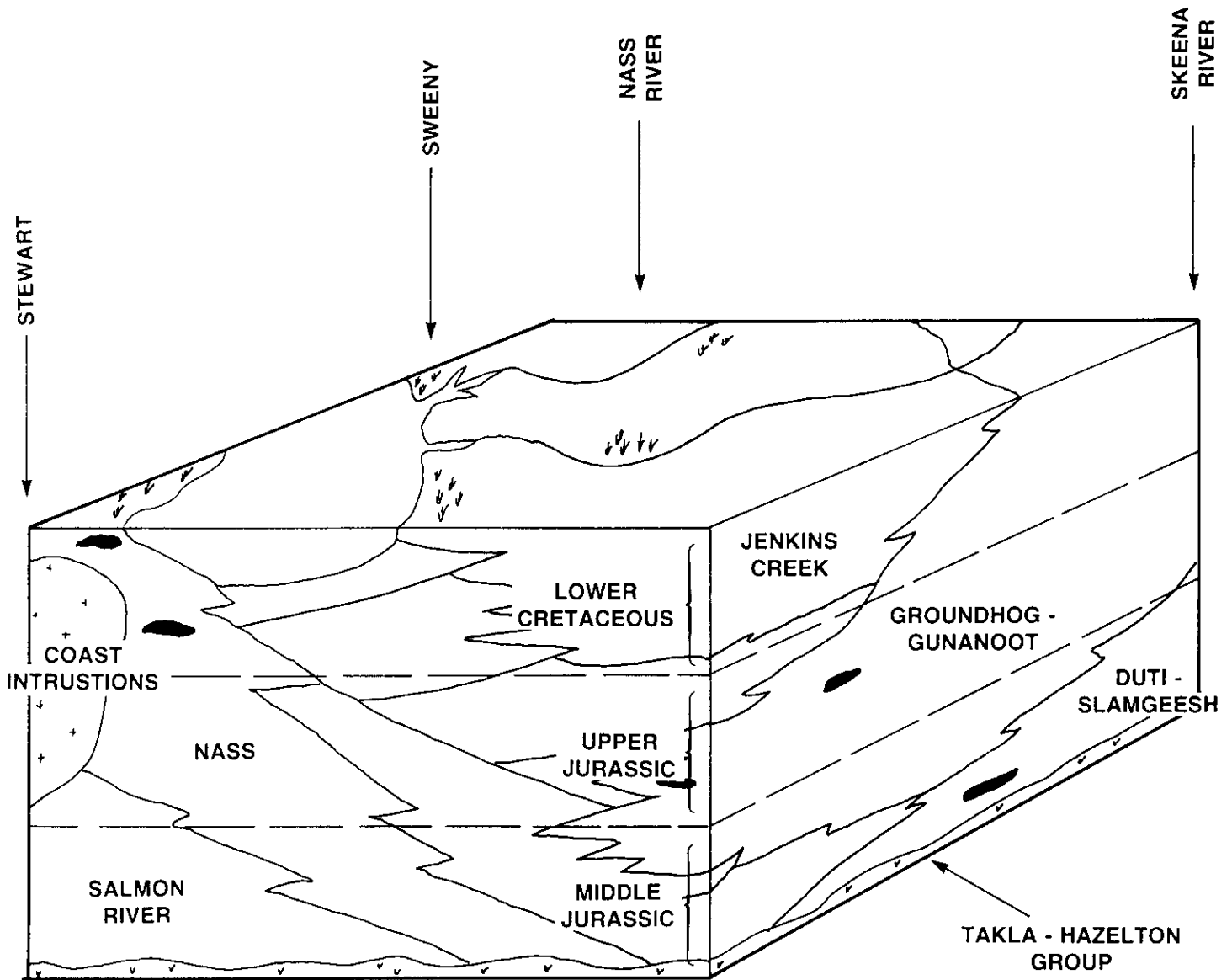


(1 - Grove, 1982; 2 - Eisbacher, 1973)

FIGURE III
CORRELATION OF BOWSER GROUP STRATIGRAPHY
(See Table II for facies descriptions)

PERIOD	WESTERN BASIN (GROVE, 1982)	EASTERN BASIN (EISBACHER, 1973)
LOWER CRETACEOUS	NASS FORMATION: siltstone, sandstone, argillite,	JENKINS CREEK FACIES: fining upwards sequence of conglomer- ate, sandstone; siltstone; shale and coal; fluvial- alluvial plain and associated marine sediments. GROUNDHOG-GUNANOOT FACIES: conglomerates, sandstone and
UPPER JURASSIC	conglomerate, minor limestone, minor coal; continental and associated marine facies.	coal intercalculated with marine shale in places; alluvial fan-coal swamp facies. DUTI-SLAMGEESH FACIES: coarse- ning upwards sequences of
MIDDLE JURASSIC	SALMON RIVER FORMATION: siltstone, greywacke, sand- stone, minor limestone, conglomerate; eugeosynclinal and littoral deposits.	shale, siltstone, sandstone, conglomerate, thin lenses of coal upsection; delta deposits prograding into marine basin.

TABLE II - BOWSER GROUP FACIES DESCRIPTIONS



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CORRELATION OF BOWSER BASIN
 SEDIMENTS

FIGURE IV

RECONNAISSANCE APPROACH AND RESULTS

Since the area of interest in the Bowser Basin covered approximately 3500 square kilometres, the first days of the program consisted of areal reconnaissance, delineating lithologies and depositional facies. This resulted in preliminary divisions of the area based on topography, exposure and surmised depositional environment. Traverses were then undertaken in each division to determine whether the sediments were marine, transitional or continental. Following this routine a large amount of ground could be covered with a maximum understanding of the typical sections found in each depositional environment.

Work proceeded from the marine sections in the south towards the continentally dominated northern area in an attempt to pin down the transition zone. The coverage is shown on Figure V.

The southern most work was completed west of Damdochax Lake and the Nass River and south of Muckaboo Creek. The sections exposed were predominately marine shales and sandstones grading northwards to a coarser littoral assemblage immediately south of Muckaboo Creek. No coals were spotted in this southern transitional zone so work continued northwards to the ridges west of the Nass River and between Konigus and Muckaboo Creeks. The presence of conglomerates, medium to coarse grained sandstone and thin coal horizons marked a continental fluvial zone. Fifteen coals were reported in this area though none exceeded one metre and averaged less than half a metre. Work proceeded northwest along the regional strike towards Muckaboo Lake and the headwaters of Rochester Creek in an attempt to find thicker overbank coals. Both this area and the area northeast of Konigus Creek were continental and though there were many occurrences of plant fossils the coals discovered were generally very thin (< .5 m).

Proceeding west of Konigus and Sweeny Creeks and north of Craven Creek revealed sections of another transitional zone. This northwest zone differed from the south as it was paralic rather than littoral in nature. Thirty-eight coal

occurrences were reported ranging from half metre blooms to 3.41 metres of solid coal outcrop. The average coal seam thickness was between half a metre and a metre, with the larger seams characterized by hand size float.

Traverses to the west of the Bell-Irving revealed marine and continental sediments and helped to spatially define the limits of the paralic zone. Work continued north and south along this trend six to seven kilometres in width but due to the late season discovery and early snow extensive coverage was not completed.

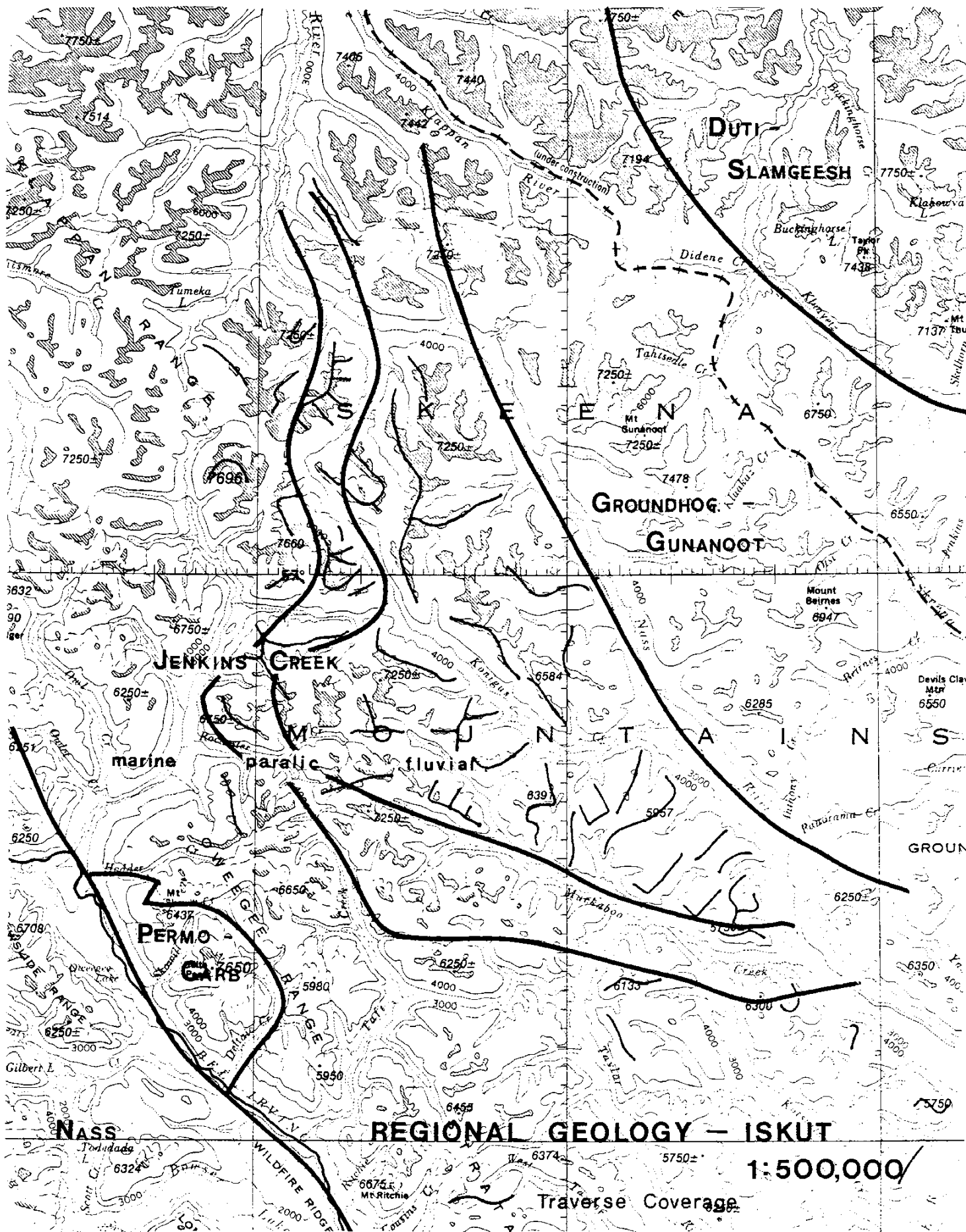


Figure V

DEPOSITIONAL FACIES CHARACTERISTICS

The sediments encountered could be categorized into one of three main depositional environments: marine, fluvial-deltaic and transitional. Assignment to a facies was based on lithological characteristics and assemblages and, to a lesser extent, structural style.

Marine

Marine sections were characterized by dark grey to black fine grained lithic sandstones, siltstones and mudstones, some being slightly calcareous and containing ironstone concretions. Chert beds, thin nodular limestones and belemnite fossils were also observed in section. Typical bedding features included small scale crossbeds, planar interbeds of fine grained sandstone and siltstone occasionally displaying load casts and other small scale soft sediment deformation. Shallower marine sediments included medium grey medium grained sandstone interbedded with darker siltstones. The sandstone usually displayed discordant, asymmetrical ripples with parallel bedding and small scale cross-bedding associated with finer grained lithologies. Occasionally, sandstones would grade into a matrix supported beach "conglomerate" containing 30% shale ripup clasts up to four centimetres in length. A general stratigraphic column is pictured in Figure VI.

Structurally, the marine section was well jointed in all lithologies, though some of the finer sediments reacted to stress by becoming phyllitic. Quartz and calcite veining was usual and associated with joint surfaces or bedding. The sandstones and siltstones fractured into blocky cubes with the mudstones breaking into long, narrow, hackly pieces. Strike varied from 275° to 320° with dips being moderately shallow (25°) to steep (80°) depending on structure which consisted of syncline/anticline pairs from 0.25 to 1.0 kilometres apart. These axes were on a trend averaging 310° with a slight plunge (5°) to the northwest. Large deviations from the regional structural trend were probably due to structure being masked by the fine grained nature of the sediment and vegetation. Generally, the topography was gentle with elevations ranging up to 1860 metres with exposure good on the north facing slope but poor on the south.

Fluvial

The fluvial exposures were identified as such by the abundance of chert-pebble conglomerate, petrified and coalified wood fragments, stem and leaf imprints, light buff colored medium grained sandstone and small carbonaceous seams interbedded with mud and siltstone. The conglomerate is usually matrix supported by medium to coarse grained speckled beige sandstone with the clast percentage ranging from 5% to 50%. The chert clasts averaged two to four centimetres in width, were well rounded, moderately sorted and brightly coloured (Plate 1). Silicified log and other wood fragments were associated with the conglomerate and uncohesive, coarse grained rusty orange sandstone which weathered into its constituent sand grains. Pebble bands in the sandstone were typical and gradational contacts based on clast percentage from conglomerate to sandstone were also usual. Buff coloured, lithic-arkosic sandstone regularly alternated with dark fine grained sandstone, hackly siltstone and mudstone. The former displayed sinuous ripples, trough and flaggy cross-bedding and contained siltstone ripups. The siltstones were typically finely laminated (even as ripups) and quite resistant in some cases. Some siltstones and fine grained sandstones weathered a dark yellow-orange, were slightly calcareous and displayed numerous plant fossils. Mudstone weathered into blocky chunks .5 - 1.0 centimetres and graded into carbonaceous mudstone with .5 - .25 centimetre bright vitrain stringers. Most fine grained lithologies contained nodular ironstone concretions. The stratigraphy of this facies is pictured in Figure VII.

Structures in these sediments were easily mapped due to the excellent exposure along the ridges. Folds were usually chevron and very tightly spaced (Plates 2 and 3) with limbs so steep that overturned beds were common. Figure VIII displays a typical cross-section encountered. The bedding and axial trends follow the regional strike, the former varying from 295°-320° and dipping either northeast or southwest, and the later trending 300° with a shallow plunge northwest. Some small fault offsets occur in fold limbs and along axes, and there were a few occurrences of drag folds, though essentially there were no large displacements evident. Jointing is well developed and common in all lithologies.



PLATE 1: Chert conglomerate interbedded
with coarse-medium grained
sandstone; typical of fluvial
facies



PLATE 2: View to the northwest of Cabin Ridge; Chevron folds in channel and near channel sediments of fluvial facies



PLATE 3: View to northwest of Muckaboo Ridge; chevron folds in overbank sediments of fluvial facies

Topography tended to be rougher in the fluvial-deltaic facies due to the coarser grained nature of the sediments and elevations that averaged 2000 metres.

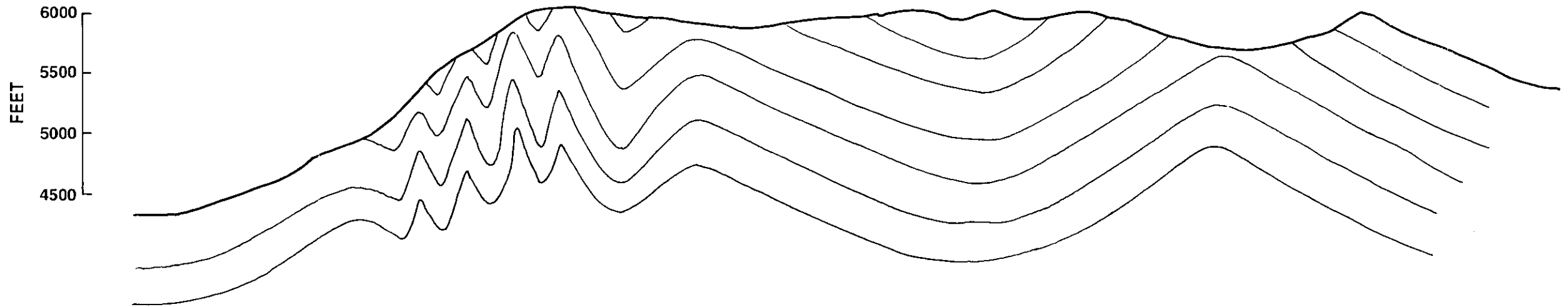
Transitional

The transitional zone traced in the reconnaissance area contained two sub-facies: littoral and paralic, with the occurrence of one or the other depending on the energy of the shoreline. Paralic sediments include those deposits which develop in quiet marginal marine conditions such as coastal bogs, lagoons, tidal flats and tidal channels. Littoral deposits develop in a higher energy marine regime such as beaches or barrier bars and are consequently coarser than those in the paralic zone.

The littoral sediments were dominated by brownish-grey, lithic-quartzose, well sorted, well rounded medium grained sandstone. This was associated with a finer grained sandstone also brownish-grey, occasionally speckled and displaying small ripples. Thinly laminated siltstones were interbedded with the sandstone as were several calcareous fossil horizons.

The typical paralic sediments included chert pebble conglomerate interbedded with light grey medium grained sandstone which was very similar to those found in the fluvial environment. Medium grained pinkish grey sandstone with festoon crossbeds, dark grey siltstone containing abundant plant fossils, orange weathering siltstone with bivalve fossils and in some cases displaying small interbeds of siltstone and fine grained sandstone which contained siltstone ripup clasts, very thinly bedded mudstone weathering into paper thin wafers, carbonaceous shale and coal were also found. Iron staining and concretions were common in the finer grained lithologies. Stratigraphy is pictured in Figure IX.

Structurally, the area is as deformed as the fluvial facies though folding style appears to be different. Folds tended to be more open though dips on the limbs could be just as steep or overturned as in the fluvial sequences (Plate 4). "S" and "Z" folds were common (Plate 5) as were homoclines and there were a few sets of chevron folding where the lithologies became coarser (Plate 6). The cross-section on Figure X displays the typical folding style.



250 m

1:2500

1 km

VERTICAL
EXAGGERATION 4:1

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B. TAMAKI

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COAL DIVISION

GENERALIZED STRUCTURE
MUCKABOO RIDGE
(VIEW TO NORTHWEST)

FIGURE VIII

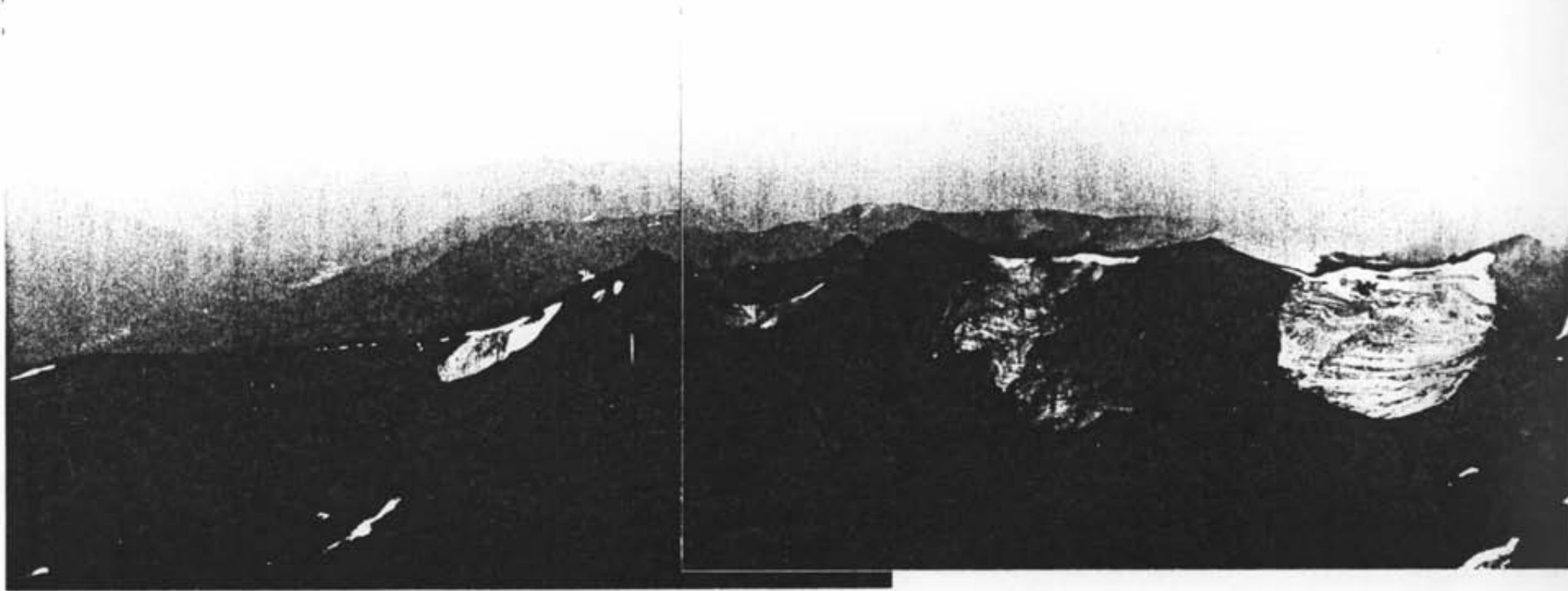
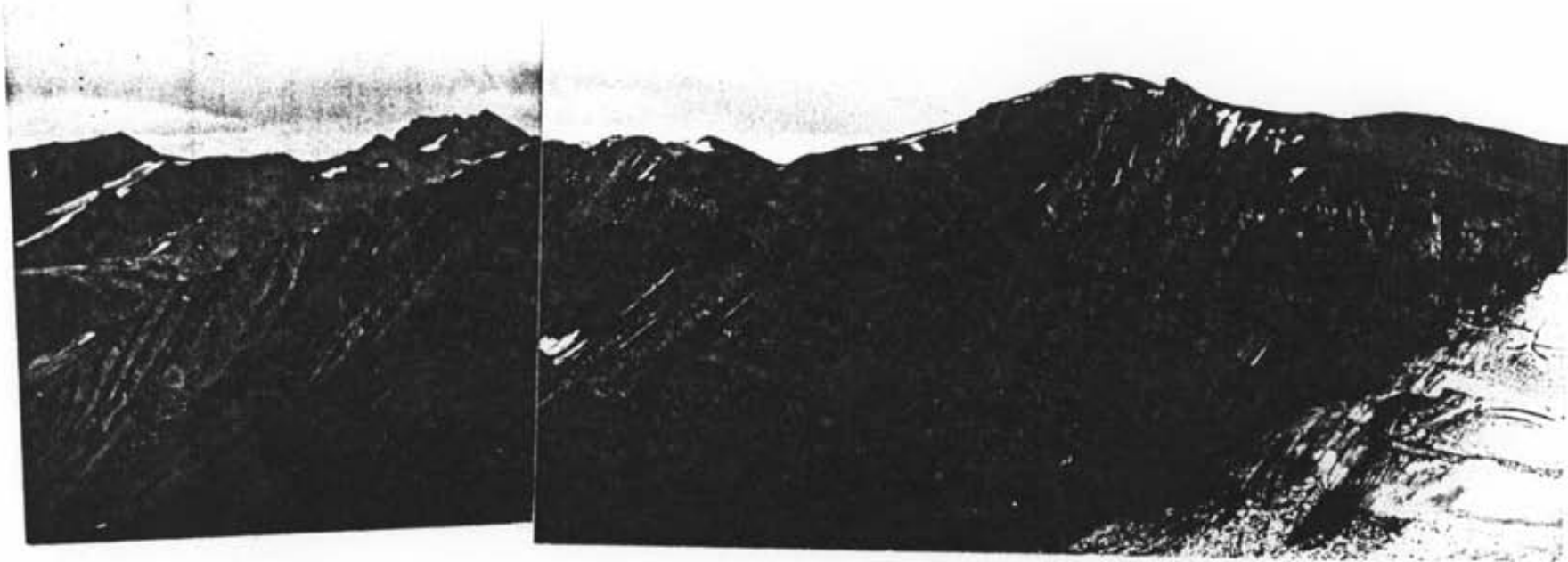


PLATE 4: Konigus Ridge structure viewed from
the north; location of 3.4 metre seam marked



- 24 -

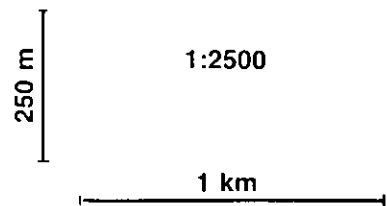
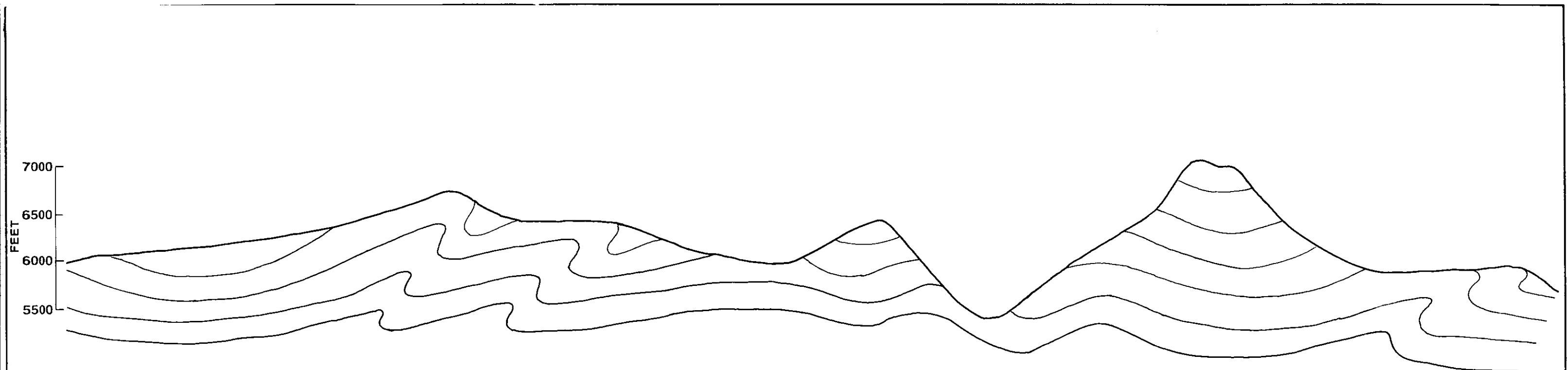
PLATE 5: View to the east of Sweeny Ridge;
"Z" and "S" fold pattern of Paralic
sediments



PLATE 6: Tight folding in coarser
clastics of Paralic facies

The bedding strike average swung up to 330° as did trends of fold axes. This could be due to the shift in the environmental boundary trend to north-south (Figure V), or to the swing of the western basinal boundary to north-south (Figure II); both away from the northwest trend of the western margin. Small scale offsets occur in anticlinal hinges but no large scale displacements were seen. Jointing is apparent in all but the fine grained lithologies though not as prevalent as in the fluvial-deltaic environment.

Topography was moderately steep and elevation higher than those in other facies (2300 metres) probably due to the greater forces felt in the western basin from the Pacific Orogeny.



VERTICAL
EXAGGERATION 2:1

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GENERALIZED STRUCTURE - SWEENY RIDGE
(VIEW TO NORTHWEST)

FIGURE X

COAL GEOLOGY

Coal occurs throughout the Bowser Basin in all of the continental facies (Table II). Those in the east occur in the Middle-Upper Jurassic Duti-Slamgeesh Facies, a sedimentary unit comprised of deltaic, prodeltaic, subsea fan and marine sediments. Above this lies the Upper Jurassic-Lower Cretaceous Groundhog-Gunanoot Facies containing alluvial fans, deltaic coal swamps and a laterally associated marine section. West of the Nass River and stratigraphically higher, lies an assemblage comprised of a fluvial alluvial plain of channel and overbank deposits, a coastal paralic-littoral zone and associated marine sediments. This is the coal bearing member encountered in the reconnaissance program and is believed to be equivalent to the Lower Cretaceous Jenkins Creek Facies described by Eisbacher (1973).

Further west the eugeosynclinal sediments of the Middle Jurassic Salmon River Formation are topped by the prograded sediments of the Upper Jurassic-Lower Cretaceous Nass River Formation. Sediments are continental in origin and contain plant and wood fossils and minor coals. At the beginning of the Middle Cretaceous the Nass River and Jenkins Creek Formations coalesed and the final closure of the northern basin was complete.

Fluvial Facies

Coal in this facies was deposited in an overbank sequence often closely associated with channel deposits of conglomerate and point bar deposits of sandstone. Depositional regimes in the fluvial facies would change abruptly due to meandering channels and cravasse splays so that coals occurred in cyclothem sequences with often up to eight repeats in a section. A typical section would contain five to ten metres of conglomerate alternating and interbedded with coarse to medium grained sandstone passing into flaggy unconsolidated sandstone. This sandstone fined upwards into a section on the order of ten metres of dark hard siltstone which, in turn, graded into a softer organic rich mudstone. If plant material had had the chance to establish, coal tops the mudstone though the coal tends to be very shaley and thin (< .5 m). This fining upwards cycle was then scoured into by another channel which deposited the basal conglomerate and the cycle was repeated. Because of

the rapid depositional changes occurring on the delta at any one time, beds tends to be poddy and hard to trace. Higher in the section conglomerates dominate the stratigraphy and can be followed.

The largest seam in the facies was approximately one metre in thickness but was partially obliterated by a fault. The areas of bloom were easily spotted and because of the cyclic nature of the sedimentation, were usually expected. Because the seams were so shaley, float tended to be very small and the seams were usually very weathered. Fifteen coal occurrences were noted falling between .2 m and 1 m in width and averaging .3 m.

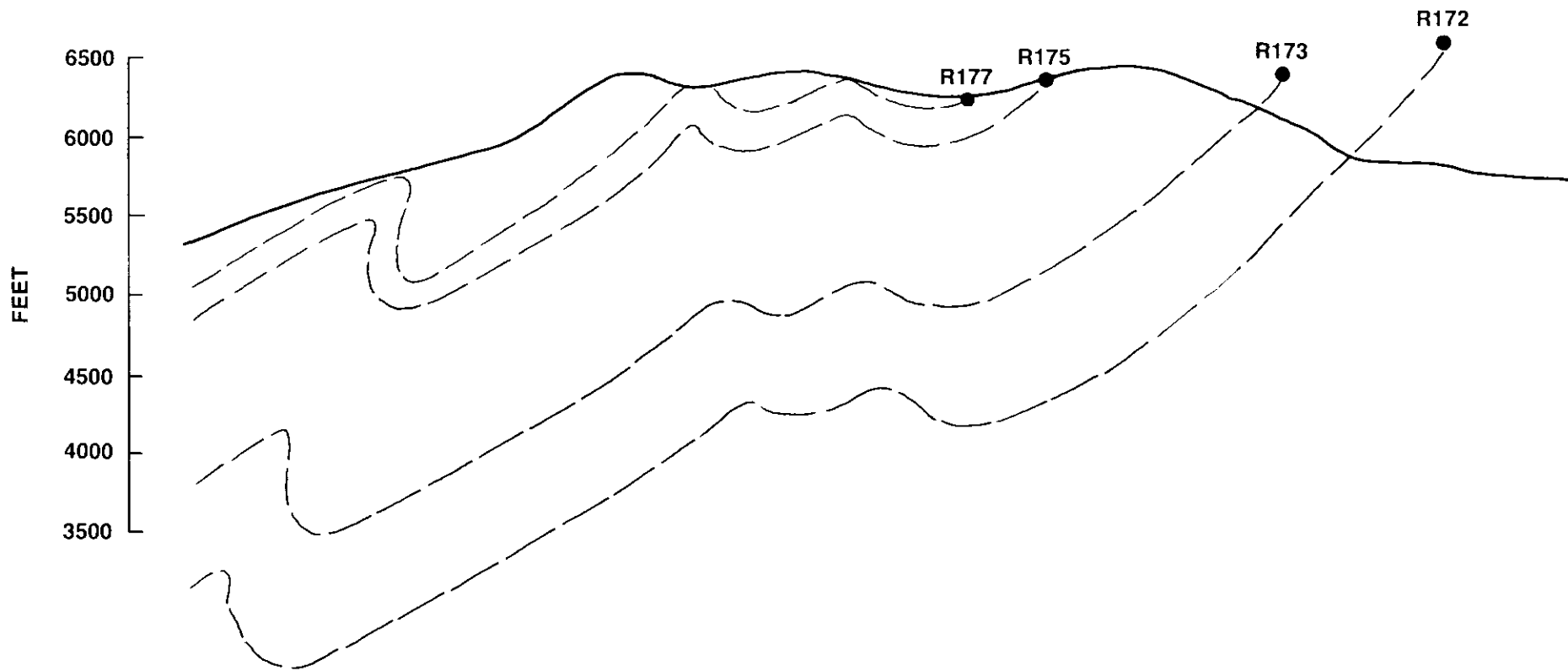
Paralic Facies

The coals occurring in the paralic facies tended to be thick, clean, and concentrated in certain locals in contrast to those of the fluvial facies (Plate 7).

The section normally consisted of fine grained sediments of siltstone, fine sandstone and shale, some being laminated, calcareous or containing bands of bivalve fossils. A few occurrences of medium grained, well sorted pink-orange sandstone with festoon crossbeds were interpreted as being eolian dunes commonly found along shores and extending inland. Coal was not distributed evenly throughout the paralic band as conditions along the shoreline varied, as did the sedimentation, according to continental and marine conditions. In the southern portion of the transition zone there are littoral deposits rather than paralic as shoreline energy may have been too great or the coastline not suitable for paralic conditions. Further northwest following the transitional zone (Figure V), conditions may have been dominated by a deltaic situation prograding from the east as there is an abundance of conglomerate and coarse grained sediments. North of this lay a quieter depositional area that was conducive for paralic deposition. In connection with this, the closing of the basin from the north, west and east probably created an estuary with surrounding tidal flats; conditions and topography suitable for coastal bog and swamp formation.

The area of interest in the paralic zone can be divided into two portions: Konigus to the south and Sweeny to the north (Figure XIII). Konigus contains eighteen coal and carbonaceous shale occurrences with four seams on Konigus Ridge totalling 5.0 metres. The largest seam of 3.41 metres was solid well cleated coal with only a few shale partings towards the top (Plate 8). A cross-sectional correlation is shown in Figure XI. Sweeny contains twenty occurrences with a very tentative seam correlation yielding 5.1 metres of coal (Figure XII). The exact relationship between the areas is not known but it would seem that the coals in the northern area are quite separate from those in the south, though a detailed stratigraphy would be needed to establish this and the correlations pictured.

Seams were easily found by tracing bloom and float throughout the draws and ridges.



250 m

500 m

VERTICAL
EXAGGERATION 1:1

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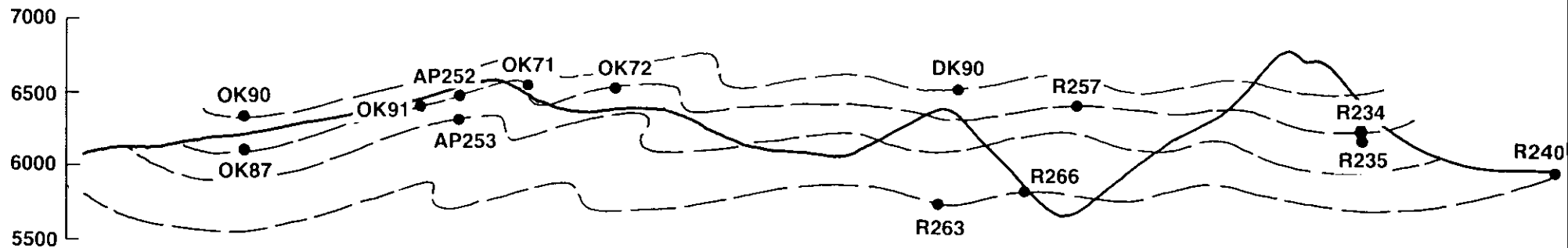
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COAL DIVISION

TENTATIVE SEAM CORRELATIONS
KONIGUS RIDGE
(VIEW TO SOUTH)

FIGURE XI



250 m

1000 m

VERTICAL
EXAGGERATION 2:1

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DRAWING NO.: 8



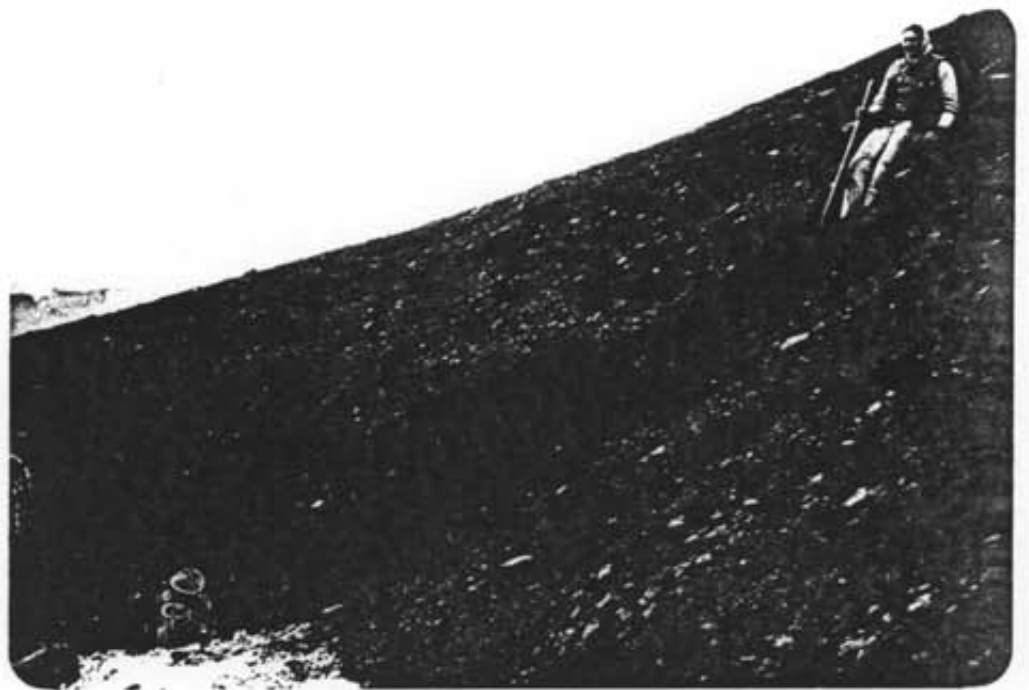
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TENTATIVE SEAM CORRELATIONS SWEENY RIDGE (VIEW TO NORTHWEST)
FIGURE XII



PLATE 7: Detail of seam DK 80(1.14m)
on Sweeny Ridge showing clean, bright
nature of coal

PLATE 8: 3.41 metre seam on Konigus
Ridge; top to the left, bottom to the
right



COAL QUALITY

The Bowser Basin contains coal ranked from High Volatile "A" Bituminous to Anthracite with the coal that underlies the Sweeney prospect considered to be semi-anthracite.

A typical quality range profile is given in Table III.

COAL QUALITY ANALYSIS	
(LORING LABS - SEPT. 8, 83)	
QUALITY PARAMETER	% (AIR DRIED BASIS)
H ₂ O	3.54 - 6.68
Vol. Matter	6.91 - 9.55
Ash	10.30 - 6.78
Fixed Carbon	76.31 - 78.05
Sulphur	0.38 - 0.51
Heating Value (BTU/LB)	12,472 - 12,972

TABLE III - COAL QUALITY ANALYSIS - ISKUT

MARKETABILITY

The annual import of anthracite coal into Canada in 1983 was 446,472 tonnes with the June 1983 imports being 35,316 tonnes ("Coal Outlook", August 29/83). It was imported from Pennsylvania into Ontario and Quebec and is most likely used as a blend coal.

Anthracite also has an industrial and domestic use in Korea although market demand is unknown.

A table of current anthracite prices is depicted in Table IV.

TABLE IV - CURRENT MARKET PRICES - ANTHRACITE
(PRICE PER TONNE)

SIZE	ASH			
	<u>7-8.9%</u>	<u>9-10.9%</u>	<u>11-12%</u>	<u>12+%</u>
Broken, Egg & Stove	\$78	\$76	\$75	-
Chestnut	\$76	\$75	\$74	-
Pea, Buckwheat & Pies	\$74	\$71	\$69	\$61
Barley	\$70	\$61	\$59	\$59
Buckwheat 4 & 5	-	\$56 & \$44	\$53 & \$48	\$42.50

FR: Coal Outlook, August 29, 1983

COAL RESOURCE DETERMINATION

The Konigus and Sweeney areas contain eight coal seams of interest totalling a cumulative thickness of 10.1 metres. The total acreage considered for the "Sweeny" property is 25,344 hectares and with a specific gravity of approximately 1.7 a total resource is calculated at 4.35×10^9 tonnes. Sterilizing 90% of this tonnage due to structure, inaccessability, channel scour, outcrop pattern and poor strip ratios would leave a resource of 435,000,000 tonnes.

The 3.41 metre Konigus seam covering only half the acreage would yield a resource of 7.35×10^8 tonnes. Penalizing this 75% for the same reasons leaves 183,000,000 tonnes.

DISCUSSION AND RECOMMENDATIONS

Coal exploration west of the Nass River using a depositional approach has proven successful in discovering a new coal play in the Bowser Basin. Due to this newly found potential and increasing exploration activity by competitors, it is recommended that the area outlined on Figure XIII and partly pictured in Plates 9 and 10, be acquired and programs of detail mapping and possibly drilling be conducted in the 1984 season.

Costs for holding the 25,344 hectare parcel of land for two years is outlined in Table V and includes the annual rental and work commitment based on dollars per hectare.

Logistically, the prospect is an attractive one as the proposed lease lies only 45 kilometres from Hiway 37 up the Bell-Irving River Valley. The distance

TABLE V - LEASE EXPENDITURES

YEAR I

\$126,720	Annual Rental (@ \$5.00/HA)
<u>\$190,080</u>	Work Commitment (@ 7.50/HA)
\$316,800	Total Expenditure

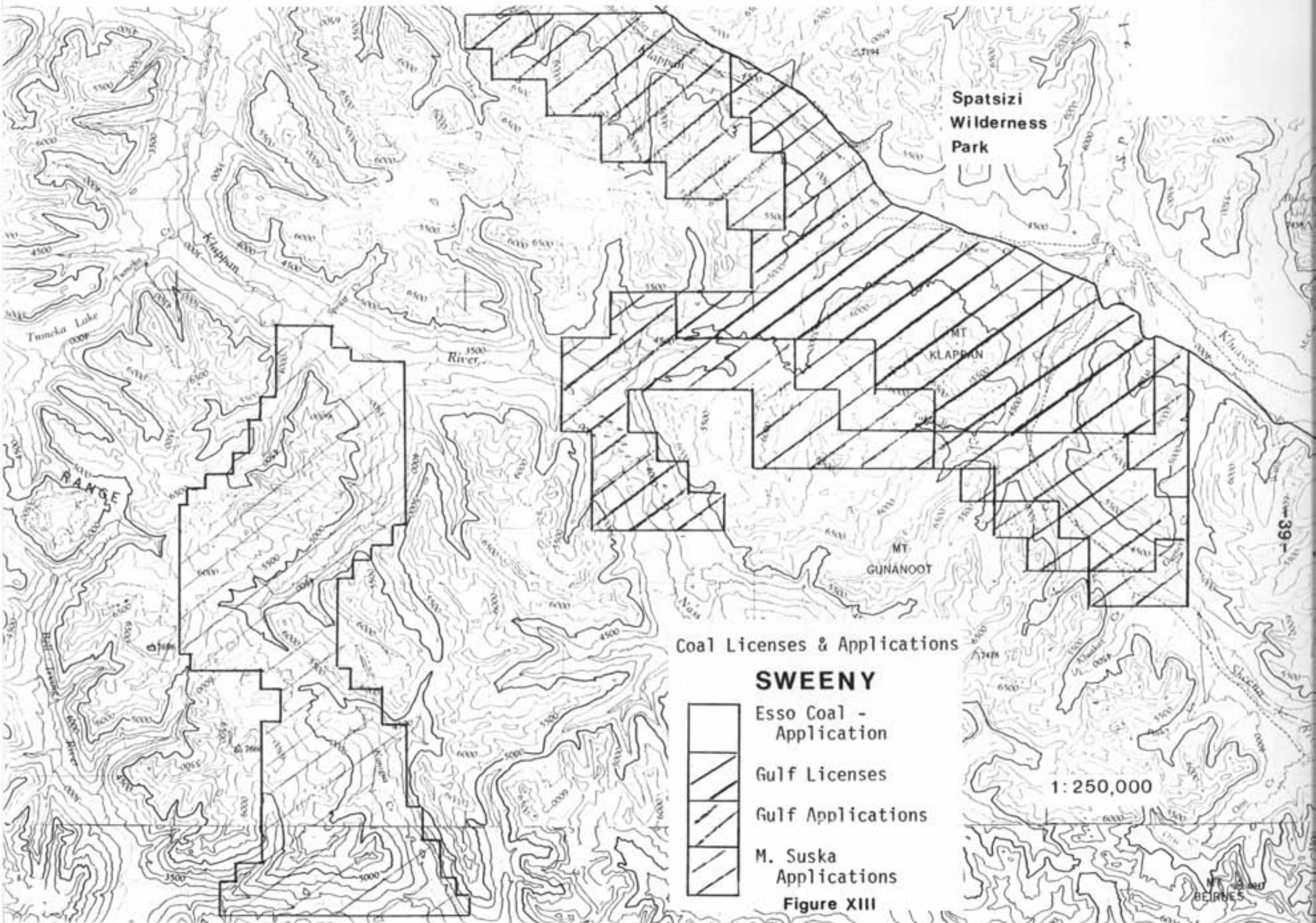
YEAR II

\$126,720	Annual Rental (@ \$5.00/HA)
<u>\$316,800</u>	Work Commitment (@ \$12.50/HA)
\$443,520	Total Expenditure

to Stewart and the loadout facilities for Granduc Mine from the point where the hiway crosses the Bell-Irving is 170 kilometres; a total of only 215 kilometres to tidewater. Existing roadlinks could be used (asbestos is trucked from Cassiar to Stewart over the same route) with the building of 45 kilometres





of roadbed or rail link to the property. The uncompleted BCR right-of-way lies 45 kilometres to the east of Sweeney, but lies uncompleted with a round trip to tidewater, via Prince George and Prince Rupert, of 1,240 kilometres.

With these factors weighed along with the potential marketability, the Sweeny prospect should be acquired in late 1983 and a thorough mapping/drilling program conducted in 1984.



Spatsizi
Wilderness
Park

Coal Licenses & Applications

-  Esso Coal - Application
-  Gulf Licenses
-  Gulf Applications
-  M. Suska Applications

1:250,000

Figure XIII

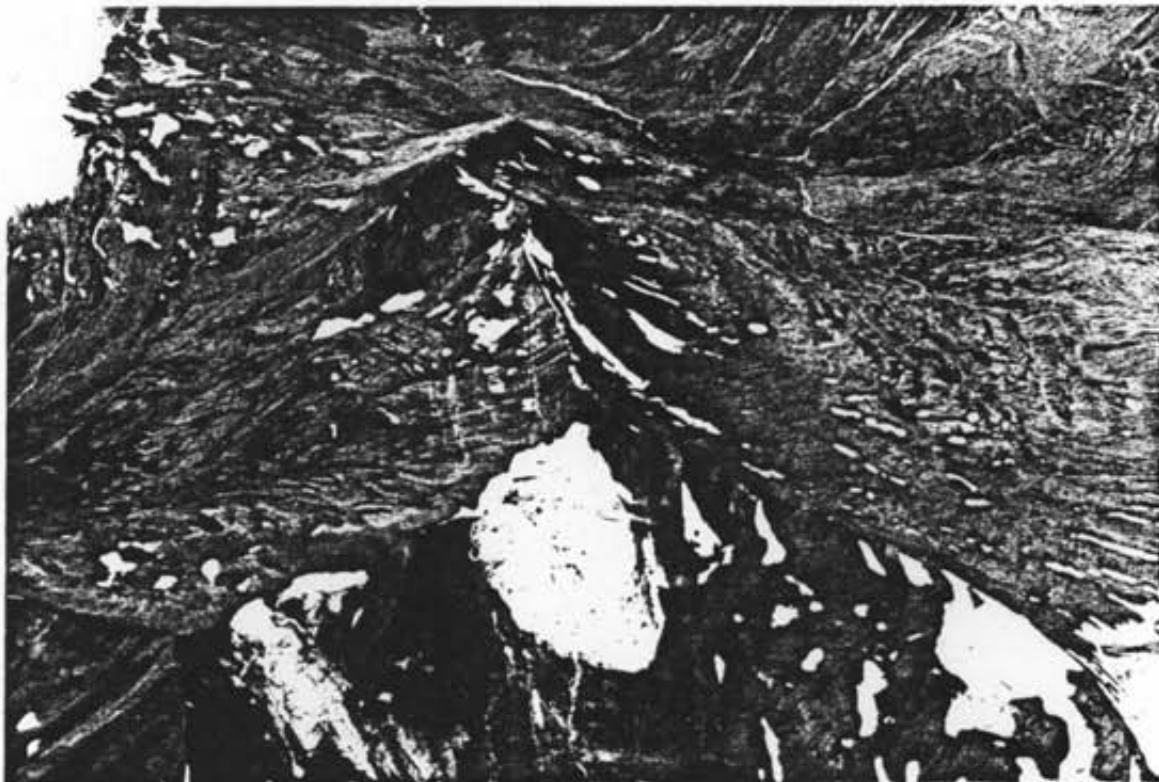


PLATE 9a: South facing view of Konigus Ridge showing location of 3.4 metre seam



PLATE 9b: Konigus Ridge showing location of 3.4 metre seam; view to the north



PLATE 10: Westerly view of
southern portion
of "Sweeny" area

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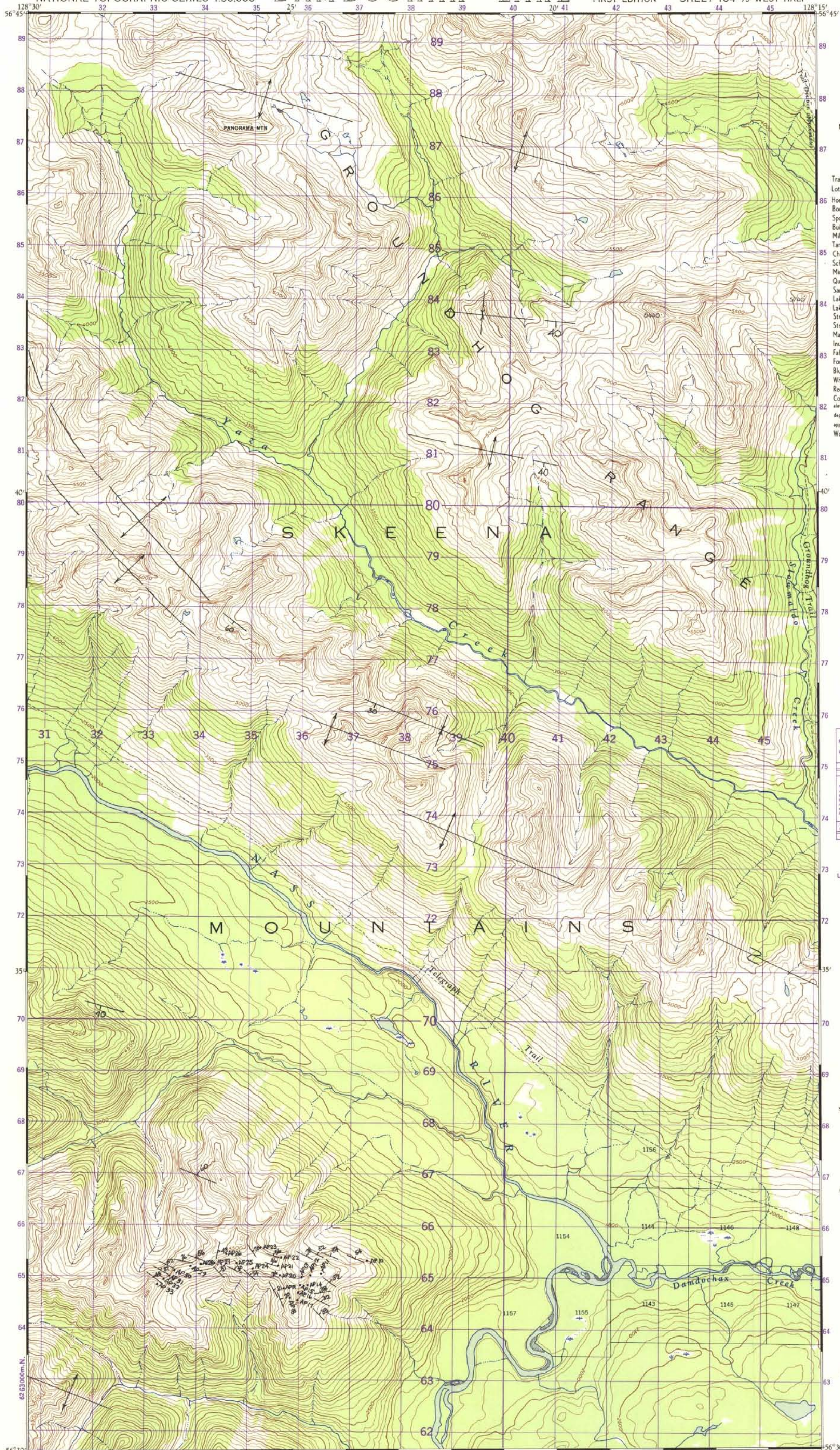
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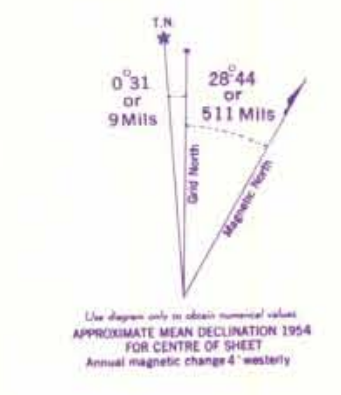
APPENDICES

- I 1:50,000 Traverse Location and Geology Maps
- II 1:25,000 Geology and License Block Map - Sweeny Available in ET 686
- III Geological Field Notes
- IV 1:250,000 Traverse Summary and Facies Boundary Map

Refer to this Map as: 104 A/9 W EDITION 1 ASE



- REFERENCE
- Trail
 - Lot Line and Number
 - Horizontal Control Point
 - Boundary Mon.
 - Spot Elevation, (in feet)
 - Building
 - Mill or Factory, small, Sawmill, etc.
 - Tank, Gas, Oil or Water
 - Church, Cemetery
 - School, Post Office
 - Mine or Open Cut
 - Quarry
 - Sand Dunes
 - Lake, intermittent or Pond
 - Lake or Shoreline, indefinite
 - Stream, intermittent or dry
 - Stream, definite
 - Marsh or Swamp
 - Inundated Land
 - Falls, Rapids
 - Foreshore Flats
 - Bluff, Cliff or Escarpment
 - Wharf or Pier
 - Reef, Rock or Small Island
 - Contours:
 - elevation
 - depression
 - approximate
 - Wooded Area



TO GIVE GRID REFERENCE ON THIS SHEET FIGURES, IGNORE THE SMALLER FIGURES POINTED OUT ON THE MARGIN OF THE MAP. THESE ARE FOR FINDING THE FULL COORDINATE. USE ONLY THE LARGER FIGURES POINTED OUT ON THE MARGIN OR ON THE FACE OF THE MAP. - 032

POINT		TECHNICAL CONTROL POINT	
FOR STANDARD MILITARY GRID REFERENCE		FOR STANDARD MILITARY GRID REFERENCE	
East	North	East	North
43	67	43	67
42	68	42	68
41	69	41	69
40	70	40	70
39	71	39	71
38	72	38	72
37	73	37	73
36	74	36	74
35	75	35	75
34	76	34	76
33	77	33	77
32	78	32	78
31	79	31	79
30	80	30	80
29	81	29	81
28	82	28	82
27	83	27	83
26	84	26	84
25	85	25	85
24	86	24	86
23	87	23	87
22	88	22	88
21	89	21	89
20	90	20	90

STANDARD MILITARY GRID REFERENCE: 432674 (The nearest 100 Metres)

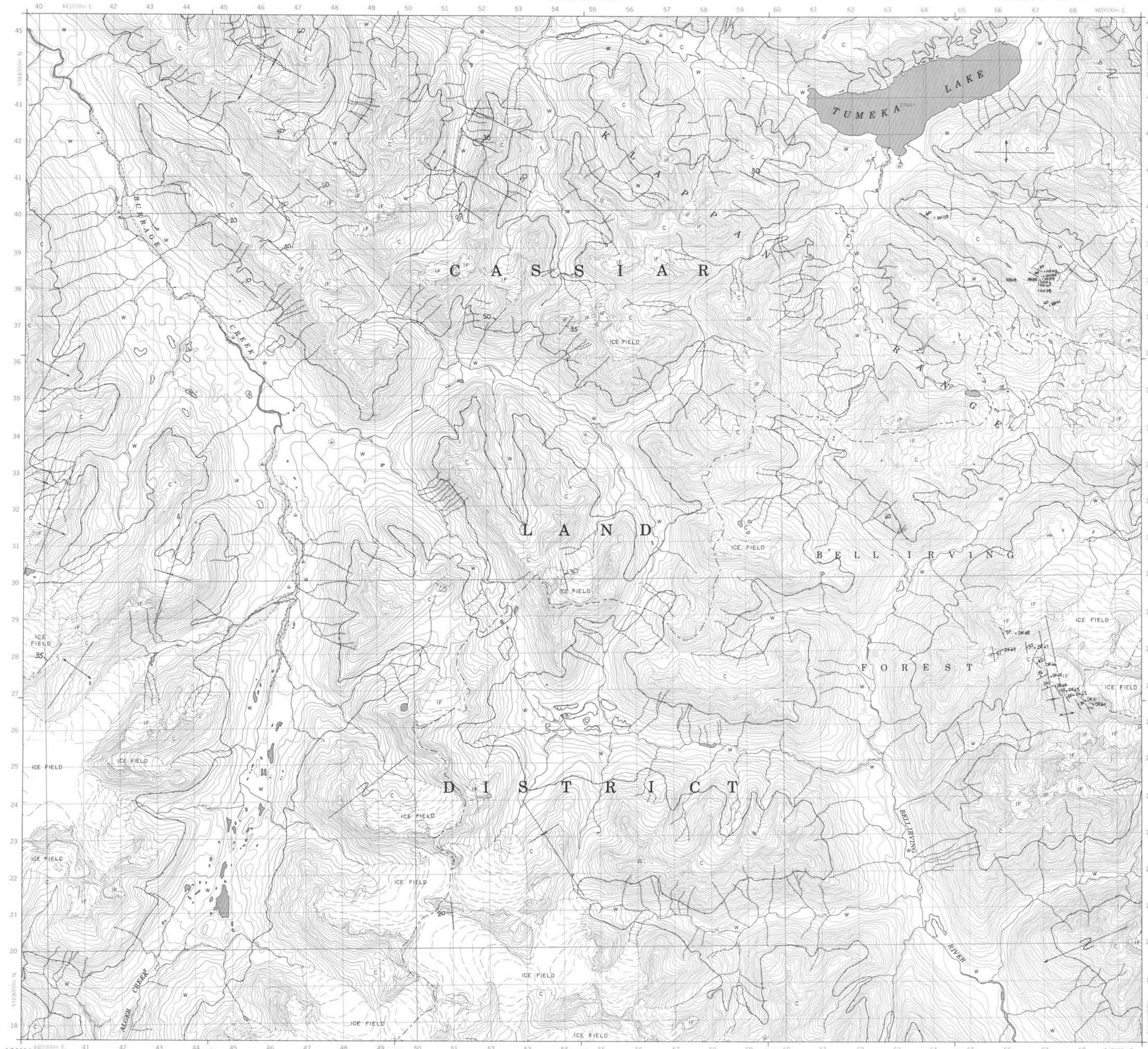
ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9



MAGNETIC DECLINATION 29° 15' EAST. AT CENTRE OF SHEET 1954. Annual magnetic change 4' westerly.

DAMDOCHAX LAKE
BRITISH COLUMBIA
104 A/9 WEST HALF
FIRST EDITION

795



LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERÇÉE, PORTAGE
BUILT-UP AREA	AGLOMÉRATION
RAILWAY, Siding, Station, Stop	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS - FIRE, RADIO	TOURS - FEU, RADIO
WELL, OIL, GAS	PUSIS PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSÉRVUAIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE DE TÉLÉPHONIE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉVAL, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, CORNE FRONTIÈRE
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH - SURVEYED - UN-SURVEYED	CANTON, PAROISSE - APPENTÉE - NON APPENTÉE
TOWNSHIP, CLS - SURVEYED, UN-SURVEYED	TOWNSHIP, ATC - APPENTÉE, NON APPENTÉE
SECTION CORNERS	CORNE DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE - INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISÉ
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP (WOODED)	MARAIS, MARÉCAJE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRING BOG	MARÉCAJE EN ENFILADE
TUNDRA, PONDS, POLYGONS	TOUNDRA, ETANGS, SOLS POLYGONAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSÉ
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
FRINGE	FRINGE
SAND, SANDDUNES	SABLE, DUNES
FALSA BOG	FALSE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY PHOTOGRAPHIE

COMPILED RESTITUTION

111	A-20117	8/87	116
84	A-20116	8/87	91
142	A-20116	8/87	134
78	A-20059	8/87	81

GRID ZONE DESIGNATION 100,000 M SQUARE IDENTIFICATION

DESIGNATION DE LA ZONE DU QUADRILLAGE IDENTIFICATION DU CARRÉ DE 100,000 M

9V VP

EXAMPLE OF METHOD USED TO GIVE A REFERENCE TO NEAREST 100 METRES

EXEMPLE DE MÉTHODE EMPLOYÉE POUR FAIRE DES RÉFÉRENCES À 100 MÈTRES PRÈS

99 98 97

95 96 97 98

REFERENCE POINT CHURCH - EGLISE (see above)

POINT DE RÉFÉRENCE ÉGLISE (voir ci-dessus)

EASTING: Read number on grid line immediately to left of point.

LONGITUDE: Note the chiffre de la ligne de quadrillage immédiatement à gauche du point.

Estimate tenth of a square from plus fine markings on point.

Estimer le nombre de dixièmes de carré entre cette ligne et le repère en direction est.

NORTHING: Read number on grid line immediately below point.

PARALLEL: Note the chiffre de la ligne de quadrillage immédiatement en dessous du point.

Estimate tenth of a square from plus fine markings on point.

Estimer le nombre de dixièmes de carré entre cette ligne et le repère en direction nord.

GRID REFERENCE: 9598

EXAMPLE OF QUADRILLAGE: 959804

Repère sur grille relative 100,000 mètres (carré 10,000 mètres)

La parcelle est référencée comme suit à 100,000 mètres (carré 10,000 mètres)

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID

QUADRILLAGE DE MILLE MÈTRES UNIVERSEL TRANSVERSE DE MERCATOR

104 G/8	104 H/5	104 H/6
104 G/1	104 H/4	104 H/3
104 B/16	104 A/13	104 A/14

The 1970 MAGNETIC BEARING is 2°38' (527 mmi) EAST OF GRID NORTH.

L'ANNÉE CHANGE DECREASING 2°3'

GRID NORTH is 0°38' (11 mmi) WEST OF TRUE NORTH for centre of map.

Le REPÈRE MAGNÉTIQUE en 1970 est à 2°38' (527 mmi) EST DU NORD DU QUADRILLAGE.

VARIATION ANNUELLE DE DÉCRÉMENTANTE 2°3'

NORD DU QUADRILLAGE est 0°38' (11 mmi) à l'ouest du NORD GÉOGRAPHIQUE au centre de la carte.

PRODUCED BY THE SURVEY AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA, THE INFORMATION CURRENT AS OF 1987.

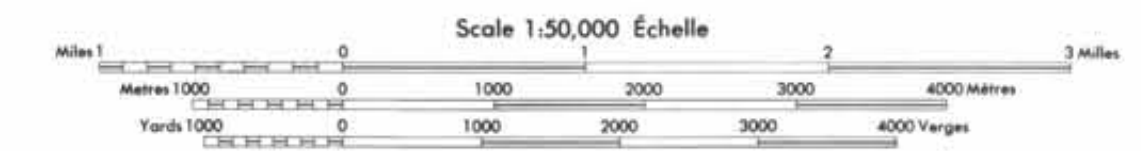
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CONTOUR INTERVAL: 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL

NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

TUMEKA CREEK
BRITISH COLUMBIA



ÉLOUDESTANCE DES COURBES: 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER

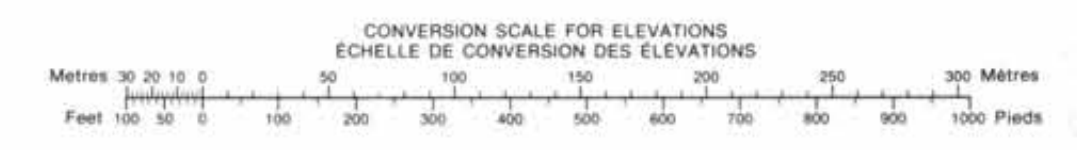
SISTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1976.

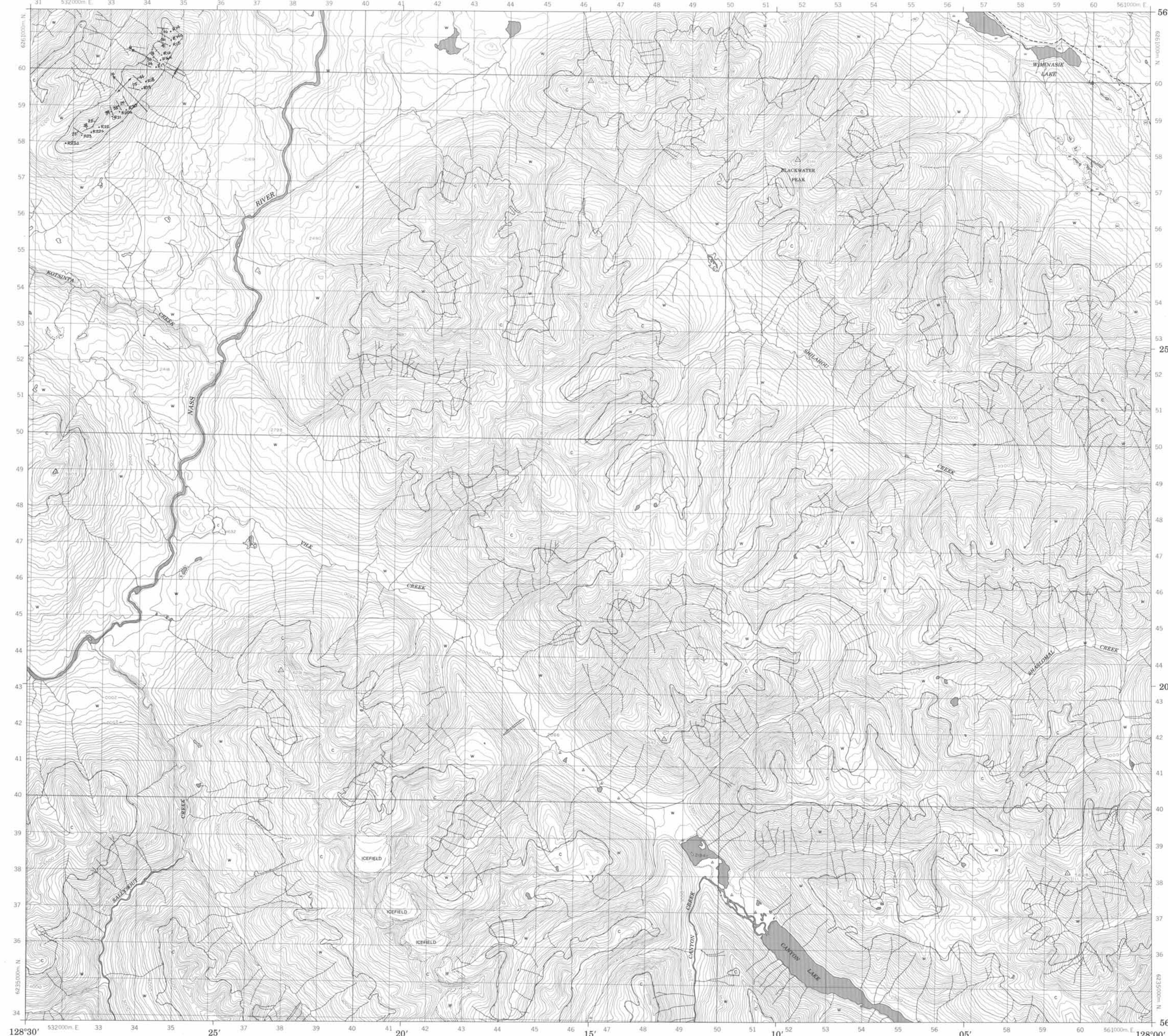
REVISÉ PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, SERVICE DES TRAVERS, COLONIE BRITANNIQUE, 1971 PAR PHOTOGRAPHIE AÉRIENNE ET LEVÉS SUR LE TERRAIN, 1967-1968.

CES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, DU CHEZ LE VENDEUR LE PLUS PRÈS.

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795



LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
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CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
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RAIL UP, GRADATION	AGIL-GRADATION
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BRIDGE	PONT
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TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	PUIXS, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE DE TÉLÉPHONIE
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DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRONG BOB	MARECAÛE EN ENPLAQUE
TUNDRA, FIELDS, POLYGONS	TOUNDRA, FRANGES, SOLS POLYGAONAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	SABLE, DUNES
SAND, SAND DUNES	SABLE, DUNES
PALEA BOB	PALEA
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY PHOTOGRAPHIE

COMPILATION RESTITUTION

GRID ZONE DESIGNATION DESIGNATION DE LA ZONE DU QUADRILLAGE: 99 WN

EXAMPLE OF METHOD USED TO GIVE A REFERENCE TO NEAREST 100 METRES (EXEMPLE DE LA MÉTHODE EMPLOYÉE POUR FIXER DES REPÈRES À 100 MÈTRES PRÈS)

REFERENCE POINT POINT DE REPÈRE: CHURCH - ÉGLISE (in above) (in above)

EASTING: Road number on grid line immediately to left of point. LONGITUDE EST: Nbre sur chiffre de la ligne de quadrillage immédiatement à gauche du repère. (Estimate length of a square from this line eastward to point.) (Estimer le nombre de carrés du carré entre cette ligne et le repère en direction est.)

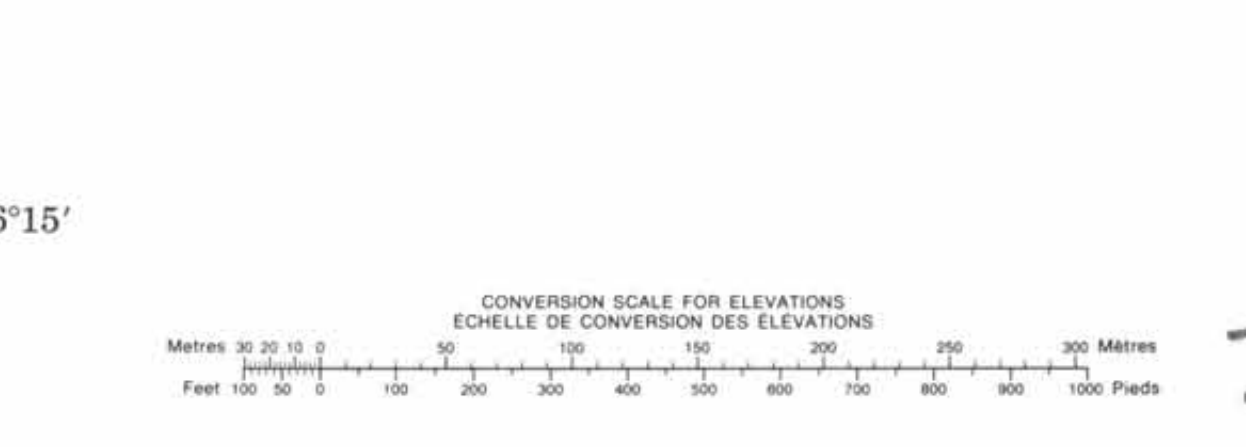
NORTHING: Road number on grid line immediately below point. LATITUDE NORD: Nbre sur chiffre de la ligne de quadrillage immédiatement en dessous du repère. (Estimate length of a square from this line northward to point.) (Estimer le nombre de carrés du carré entre cette ligne et le repère en direction nord.)

GRID REFERENCE SQUARES EXEMPLES DU QUADRILLAGE: 97584 97584

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

104 A/10	104 A/9	94 D/12
104 A/7	104 A/8	94 D/5
104 A/2	104 A/1	94 D/4

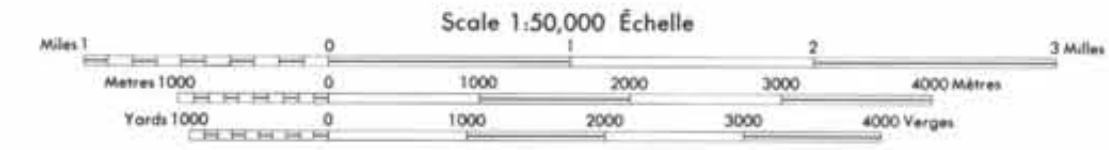
The 1978 MAGNETIC BEARING is 37°48' (484 mils) EAST OF GRID NORTH.
ANNUAL CHANGE DECREASING 2.3"
GRID NORTH is 07° (11 mils) EAST OF TRUE NORTH for centre of map.
Le REPÈRE MAGNÉTIQUE en 1978 est à 37°48' (484 mils) EST DU NORD DU QUADRILLAGE.
VARIATION ANNUELLE LE DÉCROISSANTE 2.3"
NORD DU QUADRILLAGE est 07° (11 mils) EST DU NORD GÉOGRAPHIQUE au centre de la carte.



BLACKWATER PEAK
CASSIAR LAND DISTRICT
BRITISH COLUMBIA

PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA, 1976. INFORMATION CURRENT AS OF 1974.
COMPILED BY THE SURVEYS AND MAPPING BRANCH, LAND SERVICE, BRITISH COLUMBIA, 1971, FROM AIR PHOTOGRAPHY AND FIELD SURVEYS 1966 AND 1967.
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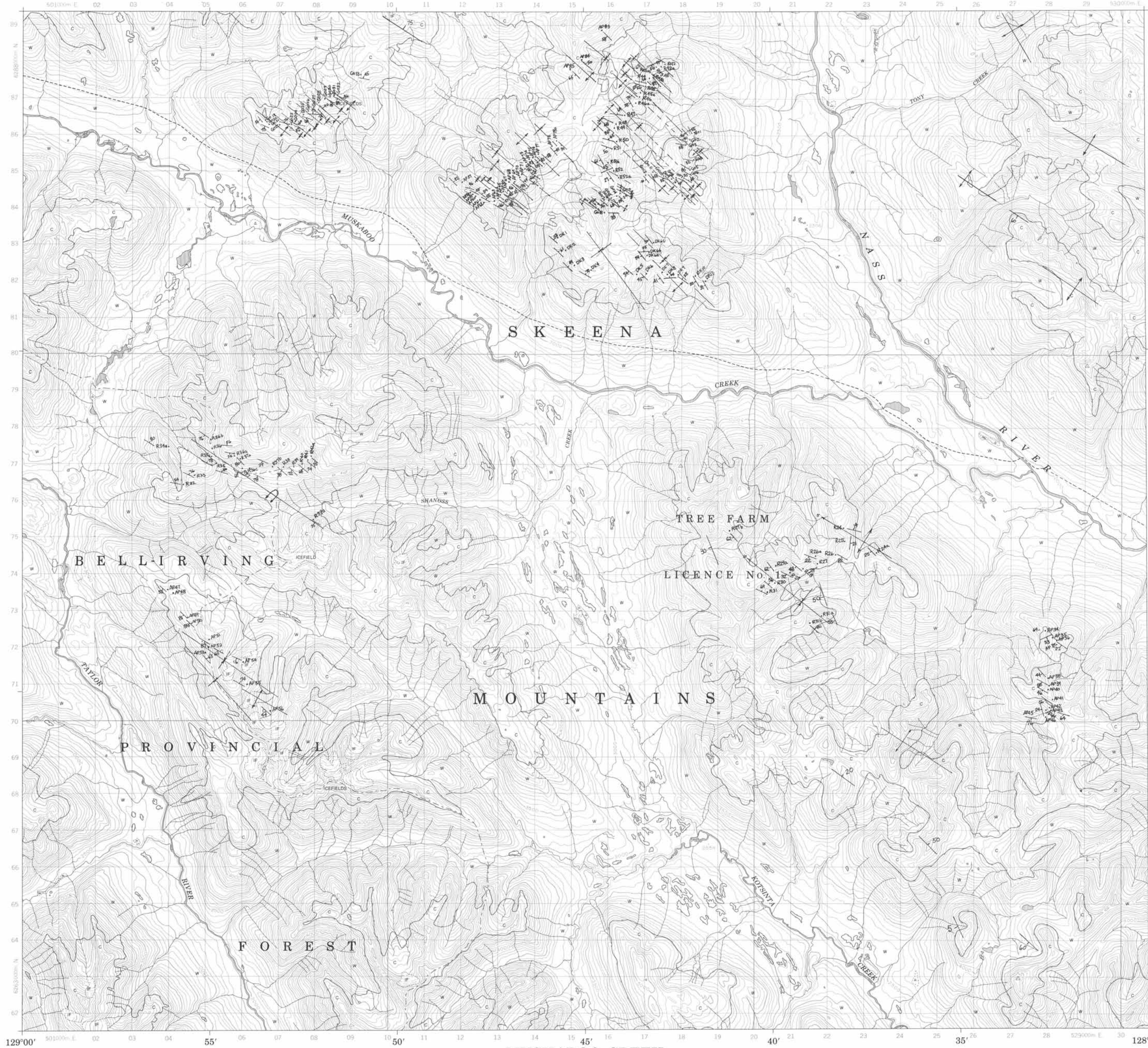
CONTOUR INTERVAL: 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION



EQUIDISTANCE DES COURBES: 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

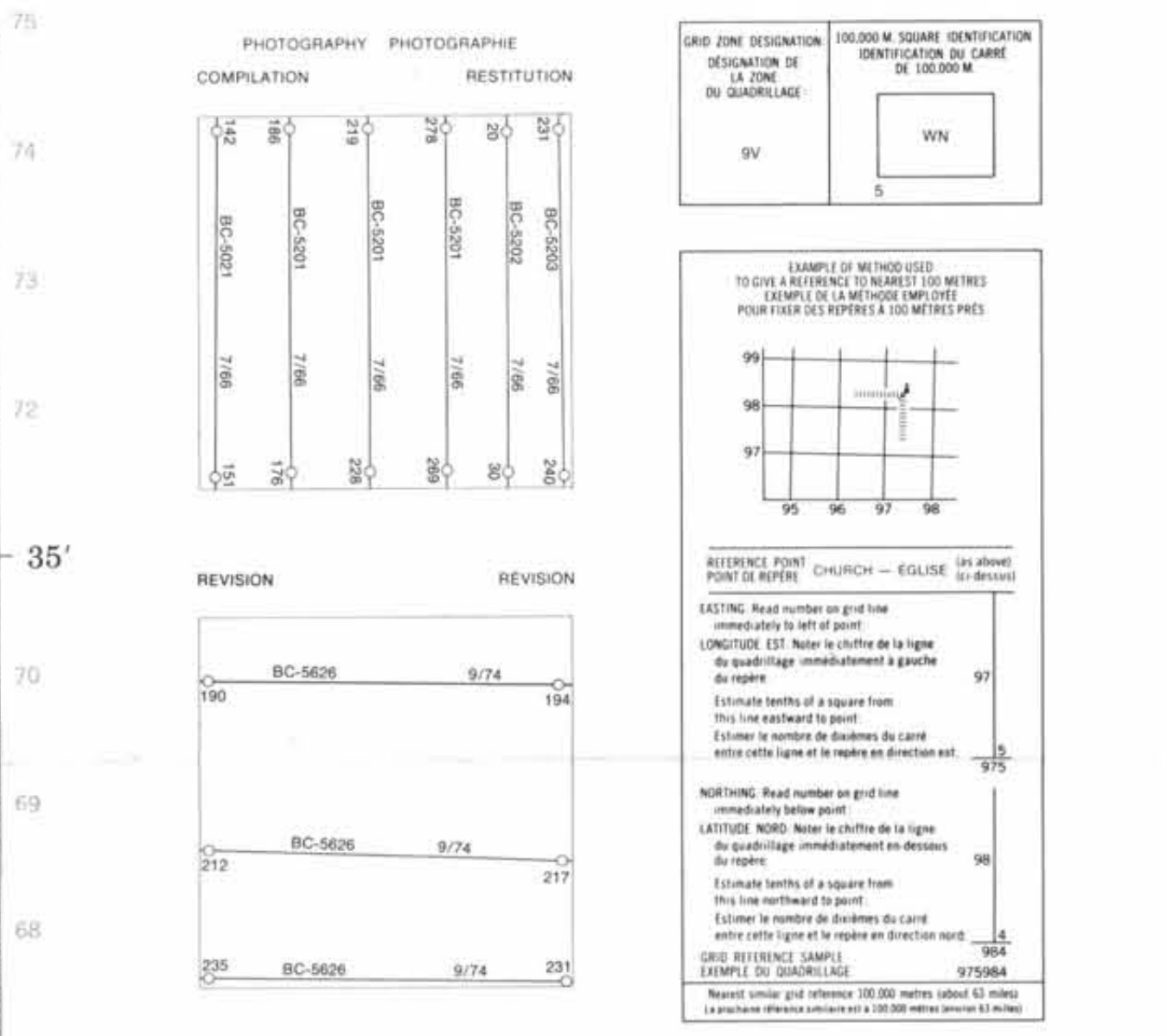
ETABLÉ PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1976. RENSEIGNEMENTS À JOUR EN 1974.
RÉVISÉ PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLOMBIE BRITANNIQUE, 1971, À PARTIR DE PHOTOGRAPHIE AÉRIENNE ET LÈVES SUR LE TERRAIN EN 1966 ET 1967.
CES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR LE PLUS PRÈS.
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LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
ROAD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WATER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PÉNÉE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIGNAL, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAWAY BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	PUSIS, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RESERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DEBLAI, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCE
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNÉ FRONTIÈRE
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH, SURVEYED - UNSURVEYED	CANTON, PAROISSE, ARPENTÉE - NON ARPENTÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-ARPENTÉE, NON ARPENTÉE
SECTION CORNERS	COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
ROAD RESERVE, PARK, ETC.	RÉSERVE ROUTIÈRE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT CÔTÉ, PRÉCIS SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE, INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTÉRMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP (WOODED)	MARAIS, MARÉCAGE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE AU DESSUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENFILADE
TUNDRA, PONDS, POLYGONS	TUNDRA, ETANGS, SOLS POLYGNONIAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT CÔTÉ, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSA BOG
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

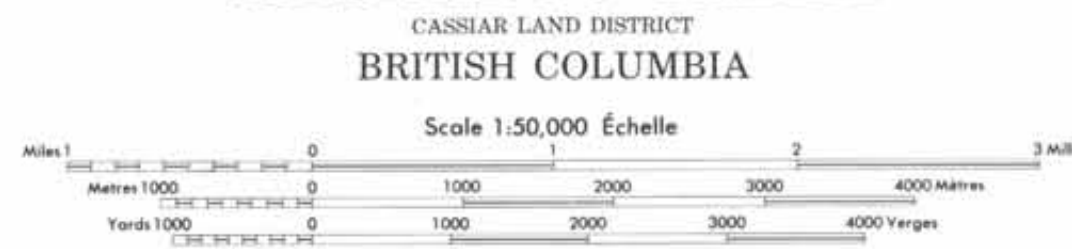


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CONTOUR INTERVAL 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

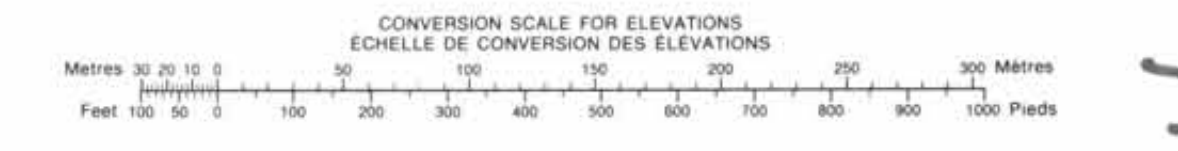


EQUIDISTANCE DES COURBES 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LÈVES ET DE LA
CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES
MINES ET DES RESSOURCES, OTTAWA, EN 1974.
RÉCUEILLI PAR LA DIRECTION DES LÈVES ET DE LA
CARTOGRAPHIE, SERVICE DES TERRES, COLUMBIE,
BRITANNIQUE, 1971 PAR PHOTOGRAMMÈTRE, AIR
ET LÈVES SUR LE TERRAIN 1966, 1968.

LES CARTES SONT EN VENTE AU BUREAU DES CARTES
DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET
DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR
LE PLUS PRÈS.

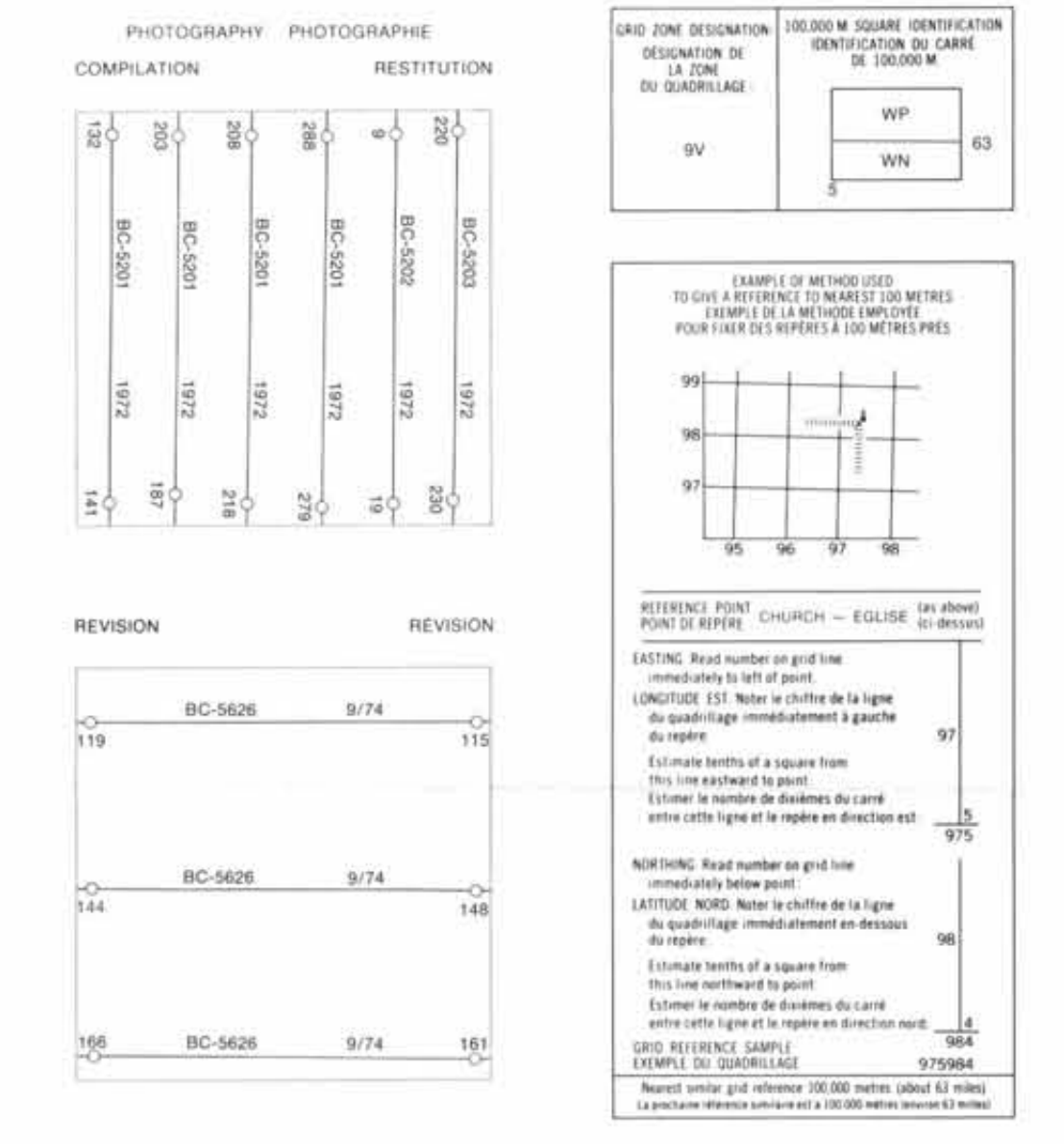
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ROADS AND RELATED FEATURES		ROUTES ET OUVRAGES CONNEXES	
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS		
LOOSE SURFACE	GRAVIER		
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER		
TRAIL, CUT LINE, PORTAGE	SENTIER, PERÇE, PORTAGE		
BULK-UP AREA	AGGLOMÉRATION		
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT		
BRIDGE	PONT		
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE		
LANDMARK FEATURES	POINTS DE REPERE		
HOUSE, BARN	MAISON, GRANGE		
CHURCH, SCHOOL	ÉGLISE, ÉCOLE		
POST OFFICE	BUREAU DE POSTE		
HISTORICAL SITE	LIEU HISTORIQUE		
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO		
WELL, OIL, GAS	Puits, PÉTROLE, GAZ		
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU		
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE		
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE		
MINE	MINE		
CUTTING, EMBANKMENT	CRÈVE, REMBLAI		
GRAVEL PIT	GRAVIER		
BOUNDARIES AND SURVEY CONTROL		FRONTIÈRES ET POINTS DE RÉFÉRENCES	
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, borne frontière		
COUNTY, DISTRICT	COMTE, DISTRICT		
TOWNSHIP, PARISH-SURVEYED, UN-SURVEYED	CANTON, PAROISSE - ARPENTÉE, NON ARPENTÉE		
TOWNSHIP, DLS - SURVEYED, UN-SURVEYED	TOWNSHIP, ATC-ARPENTÉE, NON ARPENTÉE		
- SECTION CORNERS	- CORNS DE SECTION		
MUNICIPALITY	MUNICIPALITÉ		
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.		
HORIZONTAL SURVEY POINT	REPERE DE NIVELLEMENT AVEC COTE		
BENCH MARK WITH ELEVATION	POINT COTE, PRÉCIS: SUR TERRE, SUR L'EAU		
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, PRÉCIS: SUR TERRE, SUR L'EAU		
DRAINAGE AND RELATED FEATURES		DRAINAGE ET OUVRAGES CONNEXES	
COURSE D'EAU, RIVE, INFREQUENTE	COURS D'EAU, RIVE, INFREQUENTE		
DIRECTION OF FLOW	DIRECTION DU COURANT		
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT		
FLOODED LAND	TERRAIN INONDÉ		
MARSH, SWAMP, WOODED	MARAIS, MARÉCAGE (BOISÉ)		
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX		
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU		
STRING BOG	MARÉCAGE EN ENFILADE		
TUNDRA, POADS, POLYGONS	TUNDRA, ÉTANCS, SOLS POLYGONAUX		
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES		
FORESHORE FLATS	ESTRANS, CHUTES, RAPIDES		
ROCK	ROCHE		
DAM	BARRAGE		
WHARF	QUAI		
DITCH	FOSSÉ		
RELIEF FEATURES		RELIEF	
CONTOURS	COURBES DE NIVEAU		
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES		
DEPRESSION CONTOUR	COURBE DE CUVETTE		
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF: SUR TERRE, SUR L'EAU		
ESKER	ESKER		
PINGO	PINGO		
SAND, SAND DUNES	SABLE, DUNES		
FALSE	FALSE		
WOODED AREA	RÉGION BOISÉE		
CLEARED AREA	RÉGION DÉBOISÉE		



104 H/3	104 H/2	104 H/1
104 A/14	104 A/15	104 A/16
104 A/11	104 A/10	104 A/9

The 1978 MAGNETIC BEARING is 28°30' (200 mils) EAST OF GRID NORTH.
ANNUAL CHANGE OF DECLINATION 3.2'
GRID NORTH is 0°13' (4 mils) EAST OF TRUE NORTH for centre of map.

The 1978 MAGNETIC BEARING is 28°30' (200 mils) EAST OF TRUE NORTH.
ANNUAL CHANGE OF DECLINATION 3.2'
NORTH OF QUADRANGLE is 0°13' (4 mils) EAST OF TRUE NORTH for centre of map.

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CONTOUR INTERVAL 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

Scale 1:50,000 Échelle

0 1000 2000 3000 4000 METERS
0 1000 2000 3000 4000 YARDS

EQUIDISTANCE DES COURBES 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MÉRIDIEN

ÉTABLI PAR LA DIRECTION DES LEVES ET DE LA
CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES
MINES, ET DES RESSOURCES EN 1974.

RÉVISÉ PAR LA DIRECTION DES LEVES ET DE LA
CARTOGRAPHIE, SERVICE DES TERRES, COLONIE
BRITANNIQUE, 1971. PAR PHOTOGRAMMÈTRE AÉRIEN
ET LEVES SUR LE TERRAIN 1972, 1967.

DES CARTES SONT EN VENTE AU BUREAU DES CARTES
DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET
DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR
LE PLUS PRÈS.

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LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	CHAMBRÉ
TRAIL TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
CART TRACK, PORTAGE	SENTIER, PERÇÉE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVÈTEMENT, GARE, ARRÊT
BRIDGE	PONT
BEAR JAMBAL, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	Puits, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSÉROIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉBLAI, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL	INTERNATIONALE, PROVINCIALE
BOUNDARY MONUMENT	BOISSE FRONTIÈRE
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH-SURVEYED	CANTON, PAROISSE - ARPENTÉE
UNSURVEYED	NON ARPENTÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-ARPENTÉE, NON ARPENTÉE
- SECTION CORNERS	- COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE DE NIVELLEMENT AVEC COTE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE: INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODS	MARAI, MARÉCAGE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENFLAIDE
TUNDRA, PONDS, POLYGONS	TOUNDRA, ETANGS, BOLS POLYGONAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
ROCKSHORE FLATS	ESTRANS
ROCK	ROCHER
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE COUVERTURE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
FALSA BOG	FALSE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY	PHOTOGRAPHIE
COMPILED	RESTITUTION
A-20117	B/67
A-20116	B/67
A-20116	B/67
A-20117	B/67

GRID ZONE DESIGNATION	IDENTIFICATION DU CARRE
10V	VP

95	96	97	98
97	98	99	

REFERENCE POINT
POINT DE REPÈRE

EASTING: Read number on grid line immediately to left of point.
LONGITUDE: Note the number of the line of quadrillage immediately to the right of the point.
Estimate tenths of a square from this line eastward to point.
Estimer le nombre de divisions du carré entre cette ligne et le repère en direction est.

NORTHING: Read number on grid line immediately below point.
LATITUDE NORTH: Note the number of the line of quadrillage immediately to the right of the repère.
Estimate tenths of a square from this line northward to point.
Estimer le nombre de divisions du carré entre cette ligne et le repère en direction nord.

GRID REFERENCE SAMPLES
ÉCHANTILLS DU QUADRILLAGE

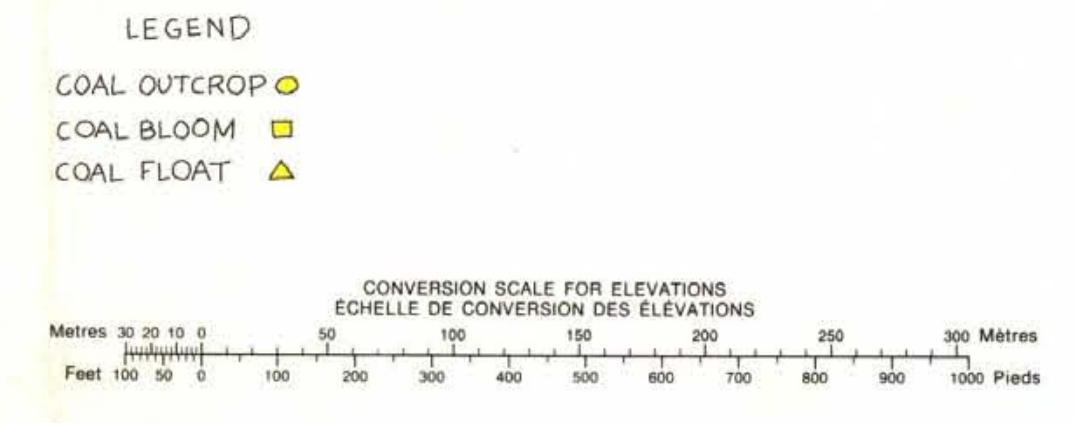
Read number on grid reference (100 000 metres above 41 000) and the number of the grid square (10 000 metres above 41 000).

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSEL TRANSVERSE DE MERCATOR

104 H/5	104 H/6	104 H/7
104 H/4	104 H/3	104 H/2
104 A/13	104 A/14	104 A/15

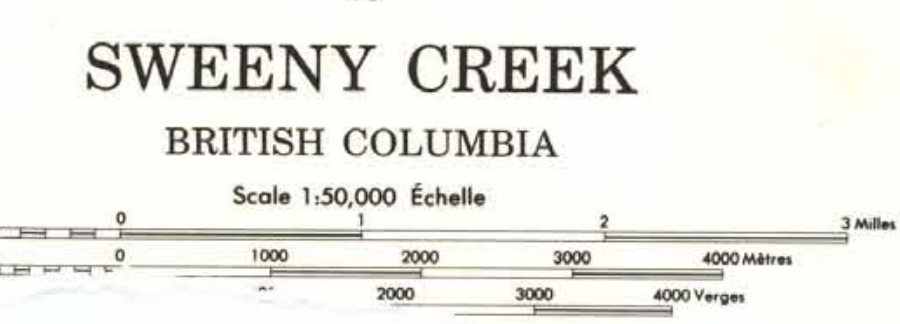
The 1978 MAGNETIC BEARING is 20°14' (520 mils) EAST OF GRID NORTH.
ANNUAL CHANGE DECREASING 3.1'
GRID NORTH is 0°12' (4 mils) WEST OF TRUE NORTH for centre of map.

La RÉSERVE MAGNÉTIQUE en 1978 est 20°14' (520 mils) EST DU NORD DU QUADRILLAGE.
VARIATION ANNUELLE DÉCROISSANTE 3.1'
NORD DU QUADRILLAGE est 0°12' (4 mils) à l'ouest du NORD VÉRITABLE, au centre de la carte.



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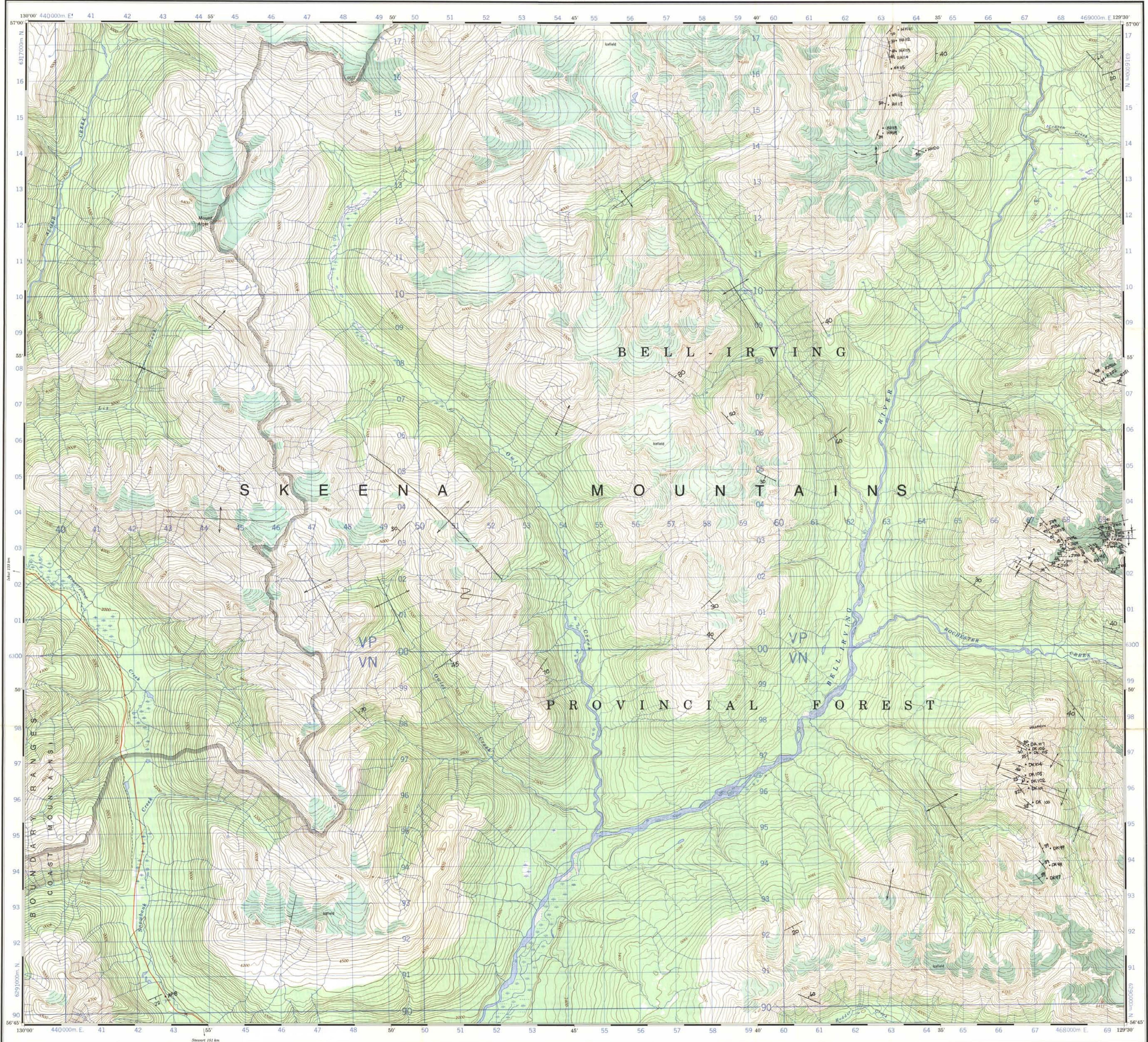
CONTOUR INTERVAL: 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1987
TRANSVERSE MERCATOR PROJECTION



EQUIDISTANCE OF CURVES: 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
Système de référence géodésique nord-américain 1987
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1978. RENSEIGNEMENTS À JOUR EN 1987. RECUEILLI PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLONIE BRITANNIQUE, 1971, À PARTIR DE PHOTOGRAPHIES AÉRIENNES ET LEVÉS SUR LE TERRAIN, 1961, 1968. CES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR LE PLUS PRÈS. © CANADA 1978 TOUTS DROITS RÉSERVÉS.

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Military users, refer to this map as: **SERIE A 721 SÉRIE MAP 104 A/13 CARTE**
 Réference de cette carte pour usage militaire: **EDITION 2 MCE ÉDITION**

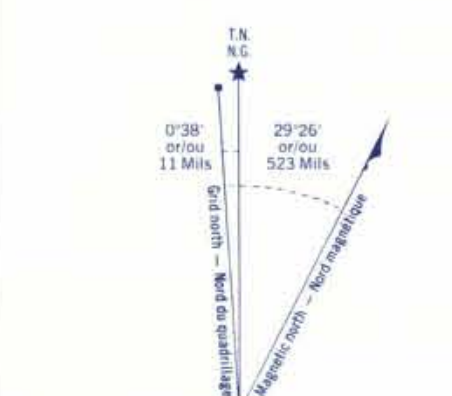
GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Area	Aire
City Limits	Limites de ville
Customs	Douane
Ditch	Fosse
Dugout	Abrevoir
Dam	Digue
Filtration Plant	Usine de filtration
Gas	Gaz
Gas Coner	Terrain de grill
Jack Yard	Ferraille
Kilo	Four
Liquor	Bouillie
Mine Waste	Débris de mine
Oil Wells	Puits de pétrole
Park	Parc
Road	Pavé
Senior Citizens Home	Foyer de jour d'or
Ski Area	Station de ski
String Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Reservoir
Water	Eau
Water Road	Chaussée d'eau

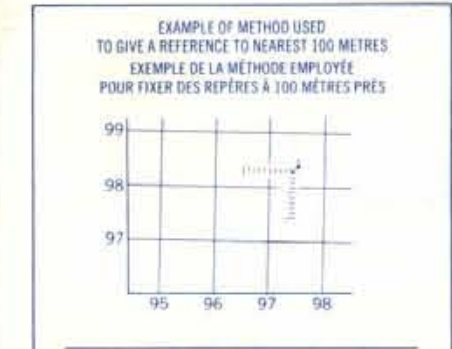
For a complete glossary see reverse side
 Pour un glossaire complet voir au verso

ABBREVIATIONS ABRÉVIATIONS

Aband	Abandonné
C	Cemetery
CO	County
E	Elevation
Fy	Ferry
IK	Indian Reserve
H	Hospital
L	Lat.
Micro	Micro-wave
Muni	Municipality
P	Post Office
PEP	Power House
RCMP	Royal Canadian Mounted Police
Res	Reservoir
Trans Sta	Transformer Station
Un	Unlicensed
Abandonné	Abandonné
Cimetière	Cimetière
Comté	Comté
Élévation	Élévation
Traverseur	Traverseur
Reserve indienne	Reserve indienne
Hôpital	Hôpital
Micro-ondes	Micro-ondes
Municipalité	Municipalité
Bureau de poste	Bureau de poste
Centrale électrique	Centrale électrique
Gendarmes Royale Canadienne	Gendarmes Royale Canadienne
Reservoir	Reservoir
Poste de transformateurs	Poste de transformateurs
Licence de véhicule	Licence de véhicule



ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES TRANSVERSE UNIVERSEL DE MERCATOR



REFERENCE POINT POINT DE REPÈRE - CHURCH - ÉGLISE - 100' above 100' above

EASTING Read number on grid line immediately to left of point.
LONGITUDE EST Note the chiffre de la ligne de quadrillage immédiatement à gauche du repère.
 Estimate tenths of a square from this line eastward to point.
 Estimer le nombre de dixièmes du carré entre cette ligne et le repère en direction est.

NORTHING Read number on grid line immediately below point.
LATITUDE NORD Note le chiffre de la ligne de quadrillage immédiatement en dessous du repère.
 Estimate tenths of a square from this line northward to point.
 Estimer le nombre de dixièmes du carré entre cette ligne et le repère en direction nord.

GRID REFERENCE 964
REFERENCE AU QUADRILLAGE 975664
 Number of squares from reference to point is 100,000 metres (approx 0.31 miles).
 Le nombre de carrés entre la référence et le point est de 100 000 mètres (environ 0,31 miles).

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

104 G/1	104 H/4	104 A/3
104 B/6	104 A/13	104 A/14
104 B/9	104 A/12	104 A/11

INDEX TO ADDING MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

Surveyed and compiled by the SURVEYS AND MAPPING BRANCH, MINISTRY OF THE ENVIRONMENT, BRITISH COLUMBIA 1971. Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, based on aerial photographs taken in 1972; information current as of 1972.

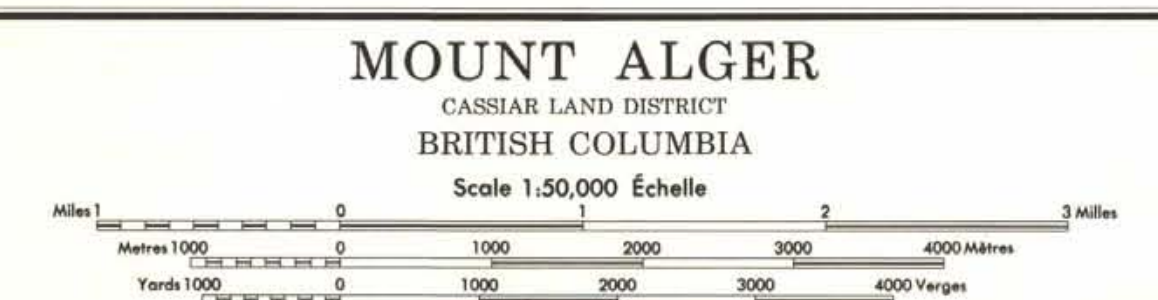
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MOUNT ALGER
 CASPIAN LAND DISTRICT
 BRITISH COLUMBIA
 Scale 1:50,000 Echelle

ROADS
 loose or stabilized surface, all weather - gravier, aggloméré, toute saison - 2 lanes or more - moins de 2 voies
 loose surface, dry weather - de gravier, temps sec - 2 voies ou plus - moins de 2 voies
 unclassified streets - rues hors classe

RAILROADS
 track, cut line or portage - sentier, percée ou portage
 FOR COMPLETE REFERENCE SEE REVERSE SIDE POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO



Line of origin for the DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ENVIRONNEMENT, COLombie, DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Map is part of a series of photographs aériennes prises en 1972. Remis-à-jour à jour en 1972.

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MOUNT ALGER
 104 A/13
 ÉDITION 2

CONVENTIONAL SIGNS

(Black unless otherwise stated)

Table of conventional signs with French and English descriptions and corresponding sign symbols. Includes categories like Road, Railway, Bridge, Tunnel, and various utility and industrial signs.

GLOSSARY

French-English glossary for signs, listing terms in both languages. Includes categories like Abandoned, Airfield, Amusement Park, Animal Farm, and various industrial and utility terms.

GLOSSAIRE

English-French glossary for signs, listing terms in both languages. Includes categories like Abandoned, Airfield, Amusement Park, Animal Farm, and various industrial and utility terms.

SIGNES CONVENTIONNELS

(Noir à moins d'indication contraire)

Table of conventional signs with French and English descriptions and corresponding sign symbols. Includes categories like Route, Railway, Bridge, Tunnel, and various utility and industrial signs.

795

Military users, refer to this map as: SÉRIE A 701 SÉRIE MAP 104 A/14 CARTE Référéncé de la carte pour usage militaire: ÉDITION 1 MCE ÉDITION



ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PÉRIÉE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, STING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVÈNEMENT, GARE, ARRÊT
BRIDGE	POST
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	EGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIÉU HISTORIQUE
TOWER, FIRE RADIO	TOURS FEU RADIO
WELL, OIL GAS	Puits, PÉTROLE, GAZ
TANK, OIL GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DEBLAI, REMBLAI
GRAVELLY PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNE FRONTIÈRE
COUNTY, DISTRICT	COMTÉ, DISTRICT
TOWNSHIP, PARISH-SURVEYED, UNSURVEYED	CANTON, PAROISSE, APPENTÉE, NON APPENTÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, DLS - NON APPENTÉE, NON APPENTÉE
	SECTION CORNERS
	COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVÈLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT CÔTÉ, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP (WOODED)	MARAIS, MARECAIE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRING BOO	MARÉPAGE EN ÉPILOUE
TUNDRA, PONDUS, POLYTONONS	TONDRA, ETANGS, SOLS POLYTONONNAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSÉ
RELIEF FEATURES	RELIEF
CONTOUR	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT CÔTÉ, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
PALSAE BOO	PALSAE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

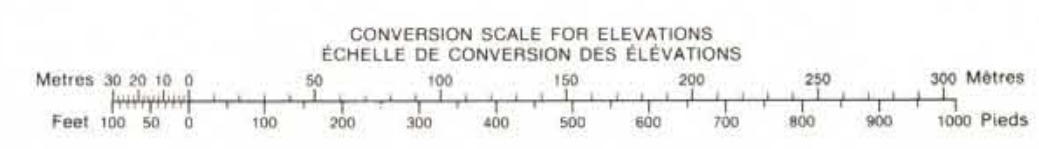
PHOTOGRAPHY	PHOTOGRAPHIE
COMPILED	RESTITUTION

REVISION	REVISION
124	120
139	143
171	167

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 5 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR		
104 H/4	104 H/3	104 H/2
104 A/13	104 A/14	104 A/15
104 A/12	104 A/11	104 A/10

LEGEND

- COAL OUTCROP
- COAL BLOOM
- COAL FLOAT



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CONTOUR INTERVAL 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION
Scale 1:50,000 Échelle

EQUIDISTANCE OF CURVES 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
Système de référence géodésique nord américain 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LÈVES ET DE LA
CARTOGRAPHIE, MINES ET DES RESSOURCES, OTTAWA EN 1970
RÉVISIONS/AMÉNAGEMENTS: 1974 PAR PHOTOGRAMMÈTRE AÉRIENNE
ET LÈVES SUR LE TERRAIN 1968, 1967.
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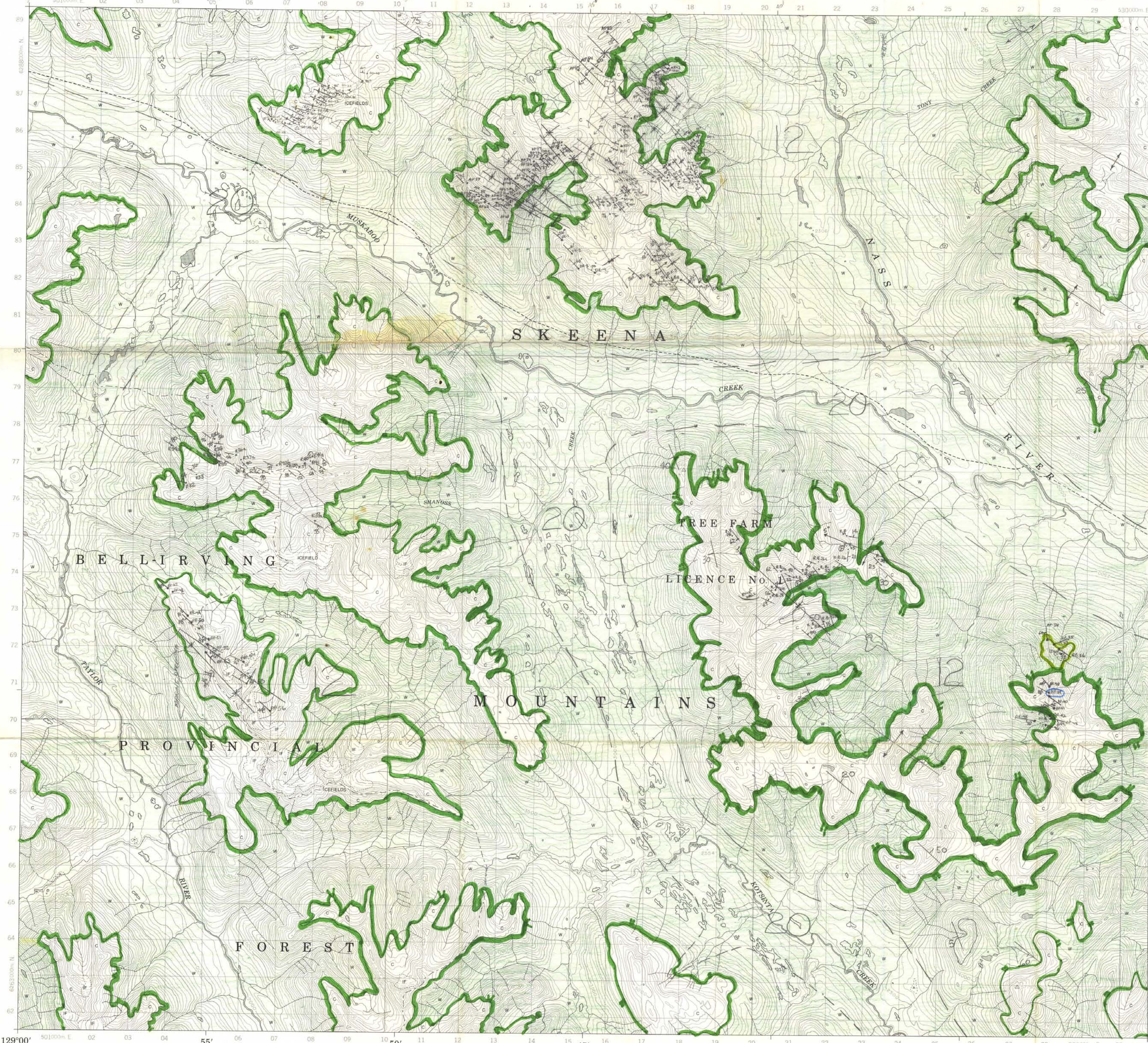
Red-1983
Blue-1984
1985

ESSO RESOURCES (DNR DEPT.)

SWEENY FIELD MAP
1983, 1984 Data
Scale 1:25,000

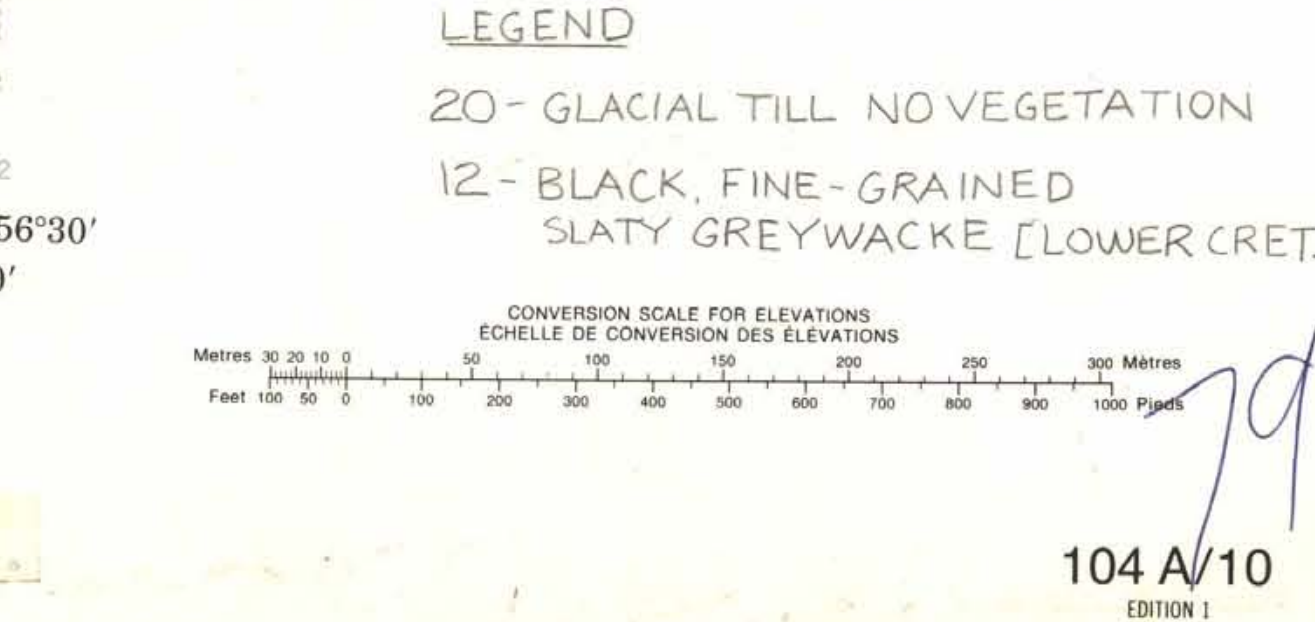
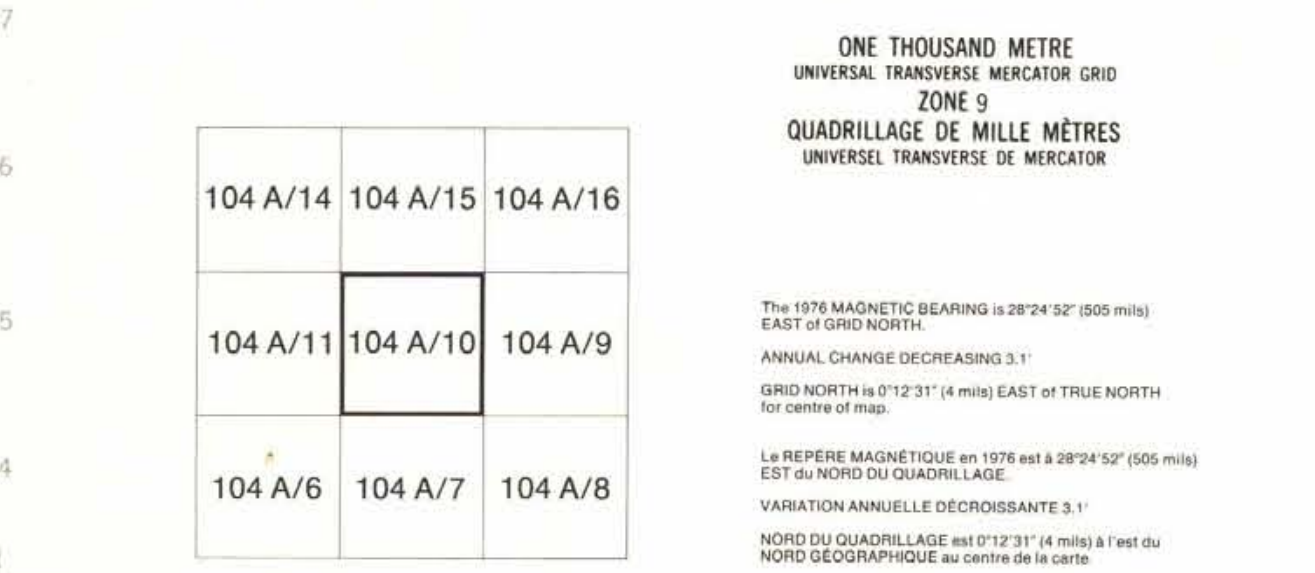
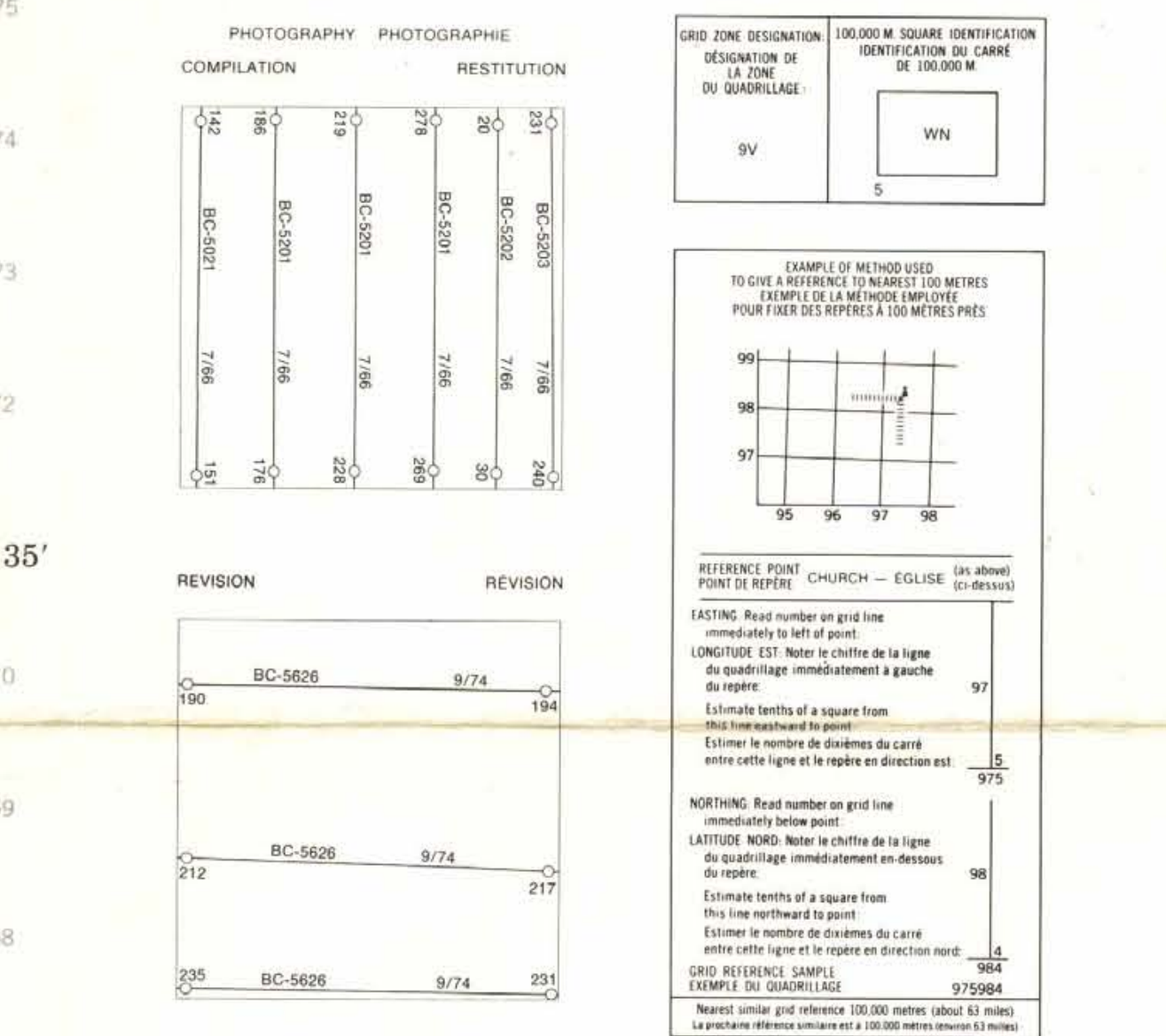
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LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERCÉE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIGNS, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVÈTEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPERE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWER, FIRE, RADIO	TOUR - FEU, RADIO
WELL, OIL, GAS	PUIS - PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR - PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉVAL, REMBLAI
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNE FRONTIÈRE
COUNTY, DISTRICT	COMITÉ, DISTRICT
TOWNSHIP, PARISH, SURVEYED	CANTON, PAROISSE - APPRÉHÉE
UNSURVEYED	NON APPRÉHÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPRÉHÉE, NON APPRÉHÉE
- SECTION CORNERS	- COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RESERVE INDIÈNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPERE PLANNIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPERE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTÉ, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE, INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, WETLAND, TURT LAGE	LAC, LAC ET MARÉCHAGE
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODS	MARAIS, MARÉCAGE (BOISE)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENFLEUR
TUNDRA, POND, POLYGNONS	TOUNDRA, ETANGS, SOLS POLYGNONAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTÉ, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



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CONTOUR INTERVAL 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

MUSKABOO CREEK
CASSIAR LAND DISTRICT
BRITISH COLUMBIA
Scale 1:50,000 Échelle

ÉQUIDISTANCE DES COURBES 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LEVÉS ET DE LA
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BRITANNIQUE, 1971 PAR PHOTOGRAPHIE AÉRIENNE
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LEGEND - LÉGENDE	
ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERCEZ, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, BRIDGE, STATION, STOP	CHÉMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
WELL, OIL, GAS	PUITS, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉBLAI, REMBLAI
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCE
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, CÔNE FRONTIÈRE
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	CANTON, PAROISSE, APPENTÉE, NON APPENTÉE
TOWNSHIP, D.L.S. - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPENTÉE, NON APPENTÉE
SECTION CORNERS	CÔNES DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDÉENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
DIRECTION OF FLOW	DIRECTION DU COURANT
FLOODED LAND	TERRAIN INONDÉ
MARKS, SWAMP, PROPOSED	MARKS, MARÉCAGE (PROJ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARD AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU DESSUS, DANS L'EAU
STRONG BOSS	MANÈGE EN BRULÉ
TUNDRA, FLOOD, POLYFORM	TUNDRA, ÉTANG, SOLS POLYFORMES
RAPIDS, FALLS, RAFTS	RAPIDES, CHUTES, RAFTES
FORESHORE FLATS	PLAQUES, CHUTES, RAFTES
ROCK	ROCHER
ISLAND	ÎLE
DITCH	FOSSÉ
RELIEF FEATURES	RELIEF FEATURES
CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
FRINGE	FRANGE
SAND, SAND DUNES	SABLE, DUNES
PALSA BOS	PALSA BOS
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY PHOTOGRAPHIE

COMPILED BY: 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

REVISION REVISION

190 BC-5626 9/74 194

212 BC-5626 9/74 217

232 BC-5626 9/74 237

100 000 M. SQUARE IDENTIFICATION DÉSIGNATION DE LA ZONE DE QUADRILLAGE

9V WN

EXAMPLE OF METRIC USED EXEMPLE DE MÉTRIQUE EMPLOYÉE

99 98 97

95 96 97 98

REFERENCE POINT CHURCH - ÉGLISE

EASTING Road number on grid line immediately to left of point

NORTHING Road number on grid line immediately above point

ESTIMATION Road number on grid line immediately below point

WESTING Road number on grid line immediately to right of point

EXAMPLE OF METRIC USED EXEMPLE DE MÉTRIQUE EMPLOYÉE

99 98 97

95 96 97 98

REFERENCE POINT CHURCH - ÉGLISE

EASTING Road number on grid line immediately to left of point

NORTHING Road number on grid line immediately above point

ESTIMATION Road number on grid line immediately below point

WESTING Road number on grid line immediately to right of point

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

The 1978 MAGNETIC BEARING is 30° 07' 30" (30 min) EAST OF GRID NORTH.

ANNUAL CHANGE DECREASING 3"

GRID NORTH is 0° 12' 31" (12 min) EAST OF TRUE NORTH for centre of grid.

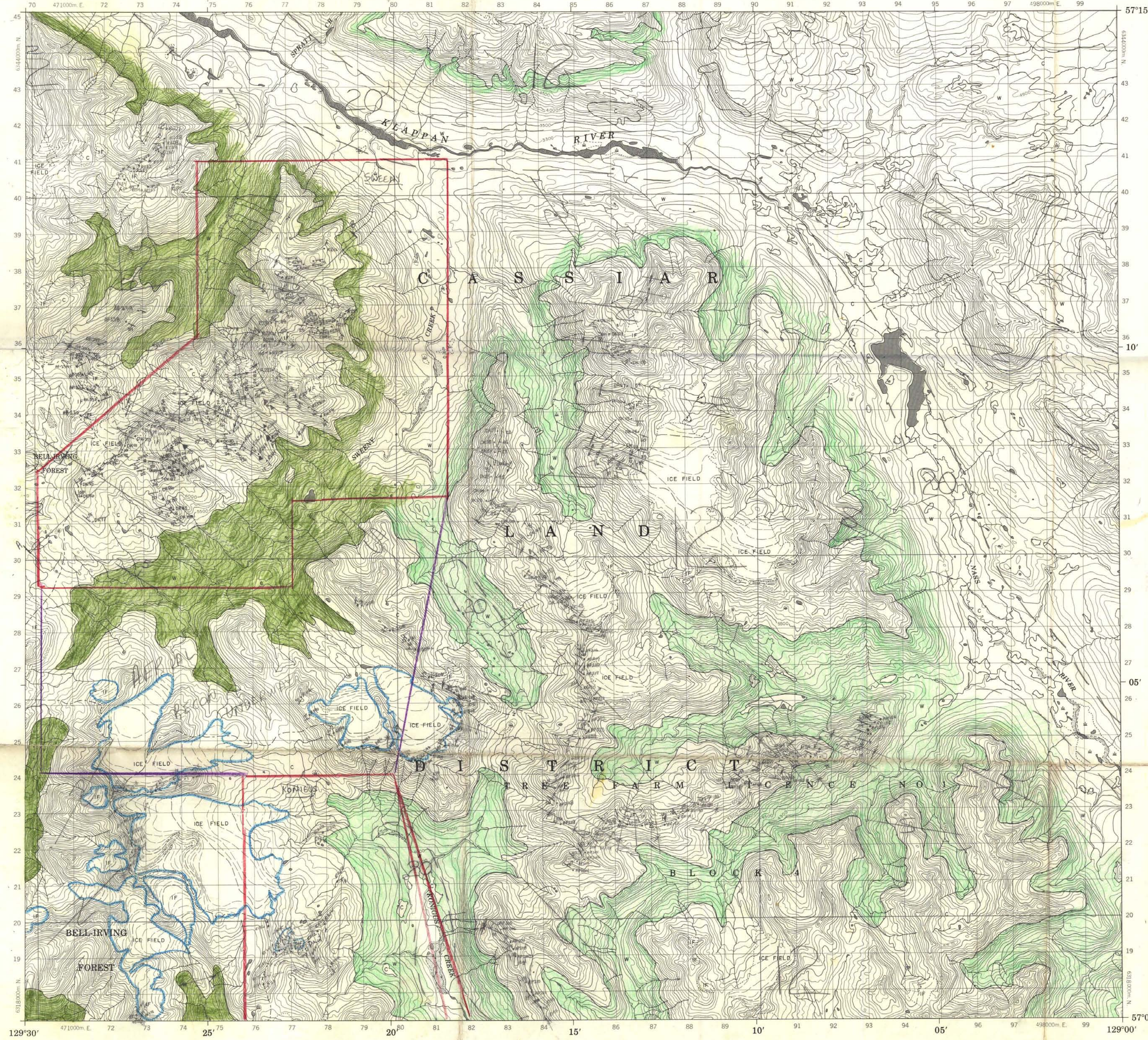
La RESPÈRE MAGNÉTIQUE en 1978 est à 28° 07' 30" (30 min) EST du NORD DU QUADRILLAGE.

VARIATION ANNUELLE DÉCROISSANTE 3"

NORD DU QUADRILLAGE est de 12' 31" (12 min) à l'est du NORD GÉOGRAPHIQUE au centre de la carte.

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795



LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERÇÉE, PORTAGE
BUILT-UP AREA	AGLOMÉRATION
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPERE
HOUSE, BARN	MANSION, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS: FIRE, RADIO	TOURS: FEU, RADIO
WELL, OIL, GAS	Puits: PÉTROLE, GAZ
TANK: OIL, GASOLINE, WATER	RÉSERVOIR: PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉBLAI, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNES FRONTIÈRES
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	CANTON, PAROISSE, APPRÉHÉE, NON APPRÉHÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPRÉHÉE, NON APPRÉHÉE
-SECTION CORNERS	-COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPERE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPERE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, APPROXIMATIF: SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE, INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODS	MARAIS, MARÉCAIS (BOIS)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARDIERS, CHEMINÉAUX
SAND, ANOUE, IN WATER	SABLE, AU DESUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENFLADE
TUNDRA, PONDS, POLYGONS	TOURNAI, ETANGS, SOLS POLYGAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHER
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE: LAND, WATER	POINT COTE, APPROXIMATIF: SUR TERRE, SUR L'EAU
ESKER	ESKER
FINNO	FINNO
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY PHOTOGRAPHIE

COMPILED A-20117 B/67 118
 RESTITUTION B/67 118

COMPILED A-20118 B/67 92
 RESTITUTION B/67 92

COMPILED A-20116 B/67 135
 RESTITUTION B/67 135

COMPILED A-20117 B/67 166
 RESTITUTION B/67 166

GRID ZONE DESIGNATION 100,000 M. SQUARE IDENTIFICATION
 DESIGNATION DE LA ZONE DU QUADRILLAGE: IDENTIFICATION DE CASE DE 100,000 M.

9V VP

EXAMPLE OF METHOD USED TO OBTAIN A REFERENCE TO METERS
 EXEMPLE DE LA MÉTHODE EMPLOYÉE POUR FIXER DES REPERES À 100 MÈTRES

REFERENCE POINT CHAURICH - EGLISE (en mètres)
 POINT DE RÉFÉRENCE: CHAURICH - ÉGLISE (en mètres)

EXISTING: Read number on grid line immediately to left of point.
 LONGITUDE: Lire le chiffre de la ligne de quadrillage immédiatement à gauche du repère.

Estimate length of a square from this line eastward to point.
 Estimer le nombre de décimètres du carré entre cette ligne et le repère en direction est.

97

NORTHING: Read number on grid line immediately below point.
 LATITUDE: Lire le chiffre de la ligne de quadrillage immédiatement en dessous du point.

Estimate length of a square from this line northward to point.
 Estimer le nombre de décimètres du carré entre cette ligne et le repère en direction nord.

95

GRID REFERENCE SAMPLE
 REPERE DE QUADRILLAGE 97956

Nearest similar grid reference 100,000 metres (about 62 miles).
 La plus proche référence semblable est à 100,000 mètres (environ 62 miles).

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSEL TRANSVERSE DE MERCATOR

104 H/5	104 H/6	104 H/7
104 H/4	104 H/3	104 H/2
104 A/13	104 A/14	104 A/15

The 1978 MAGNETIC BEARING is 29°14' (500 miles) EAST of GRID NORTH.
 L'ANNÉE CHANGING DECREASING 3.1'
 GRID NORTH is 0°13' (4 miles) WEST of TRUE NORTH for center of map.

LA RÉFÉRENCE MAGNÉTOUSE en 1978 est à 29°14' (500 miles) EST du NORD DU QUADRILLAGE.
 VARIATION ANNUELLE DÉCROISSANTE 3.1'
 NORD DU QUADRILLAGE est 0°13' (4 miles) à l'ouest du NORD VÉRITABLE au centre de la carte.

LEGEND

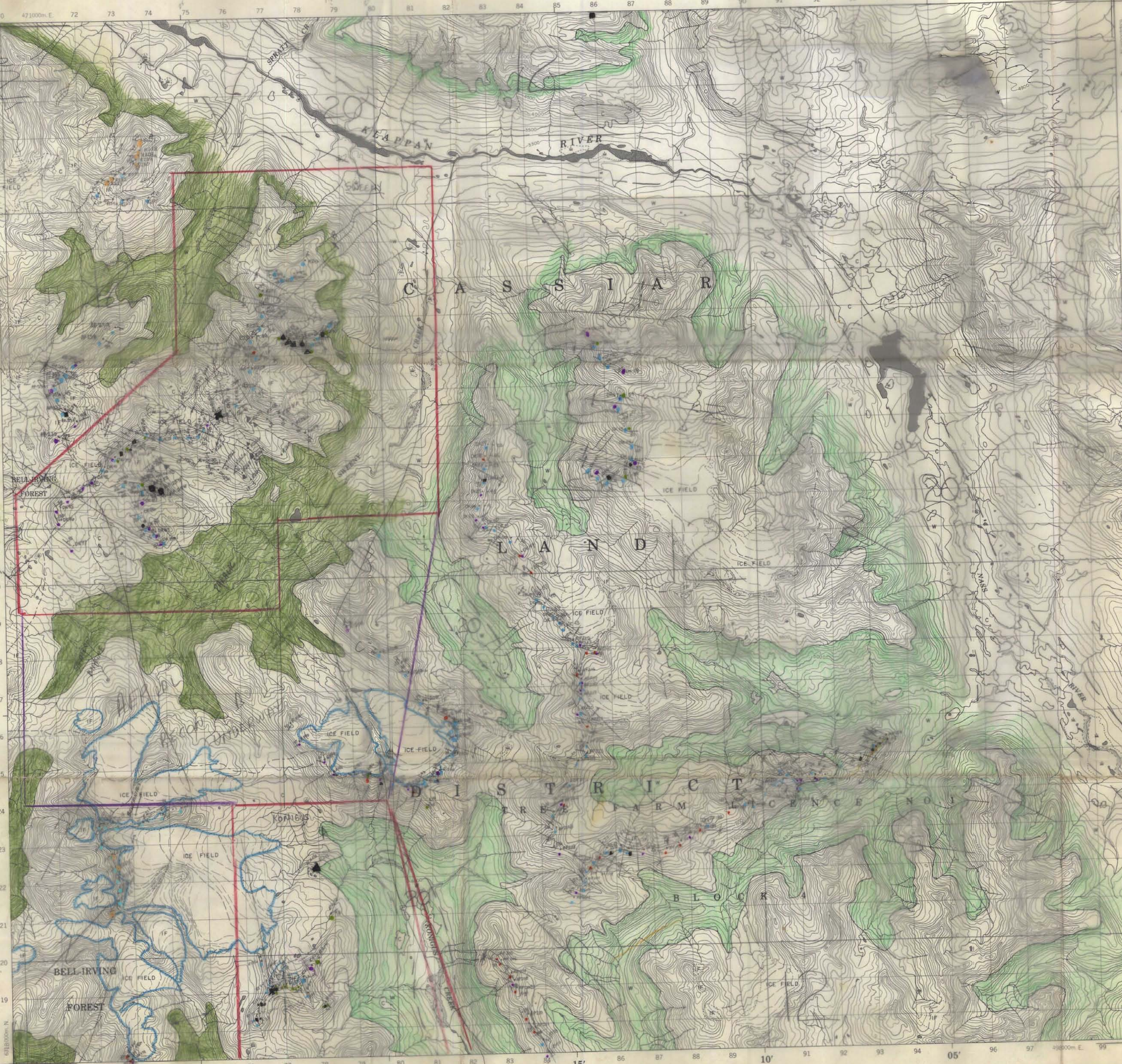
20- GLACIAL TILL
 NO VEGETATION

12- BLACK, FINE-GRAINED SLATY GREYWACKE [LOWER CRET. - UPPER JURASSIC]

CONVERSION SCALE FOR ELEVATIONS
 ÉCHELLE DE CONVERSION DES ÉLEVATIONS

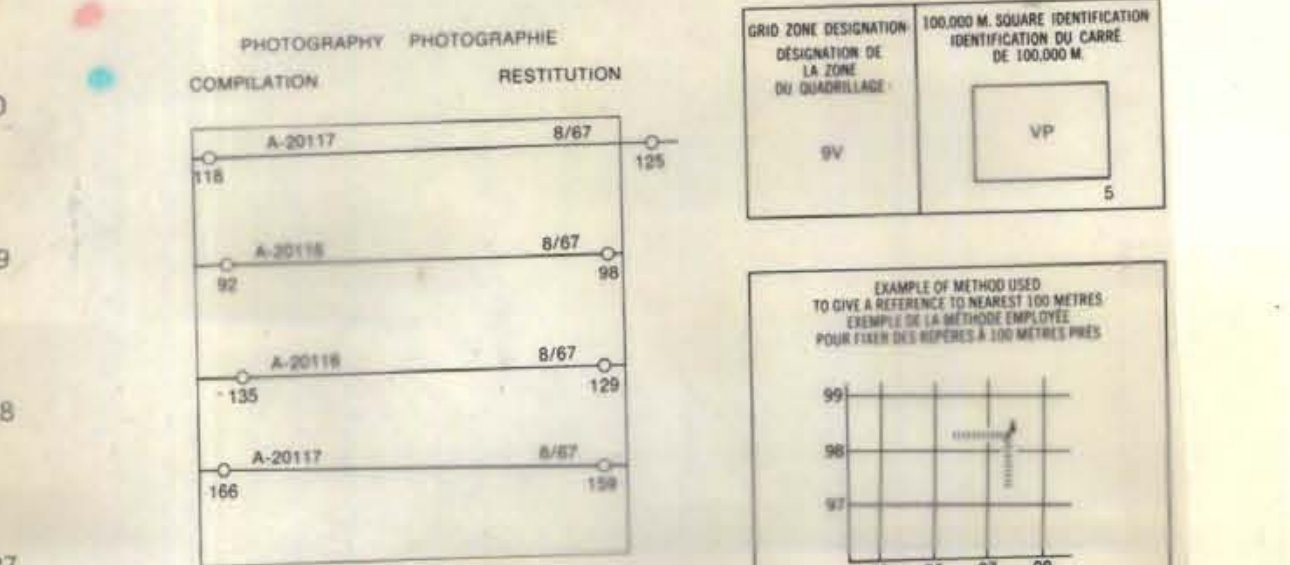
Metres 30 20 10 0 100 200 300 400 500 600 700 800 900 1000 Mètres
 Feet 100 0 100 200 300 400 500 600 700 800 900 1000 Pieds

795



LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
ROAD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
ROAD SURFACE, LOOSE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HYVER
TRAIL, CUT LINE, PORTAGE	SERVICE PERÇÉ, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVÈNEMENT, SANS ARRÊT
SEAPLANE BASE, ANCHORAGE	PONT
LANDMARK FEATURES	HYDROAÉROPORT, MOULAGE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIÉU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	Puits, PETROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSÉROIR, PETROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE DE TÉLÉPHONIE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DEBLAI, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCE
INTERNATIONAL BOUNDARY MARKING	INTERNATIONALE, FRONTIÈRE / MARQUE
COUNTY, DISTRICT	CANTON, PAROISSE, ARRISSES
TOWNSHIP, PARISH, SURVEYED UNSURVEYED	TOWNSHIP, ATC-ARRISSES, NON ARRISSES
TOWNSHIP, DLS - SURVEYED UNSURVEYED	SECTION, COMBES
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	RÉPÈRE DE PLANIMÉTRIE
VERTICAL SURVEY POINT WITH ELEVATION	RÉPÈRE DE NIVELLEMENT AVEC COTE
POINT OF ELEVATION, PNEUMATIC, LAND, WATER	POINT COTE, PNEUM. SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHOULDER, WEIRGATE	COURS D'EAU, AVÈC, ARRÊTÉ
DIRECTION OF FLOW	DIRECTION DU COURSANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TIERRA INONDÉE
MARKER, SWAMP, WOODS	MARQUE, MARÉCAIS (BOIS)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
MARKER, SWAMP, WOODS	VALLE AU DERRIÈRE, MARÉCAGE
TUNDRA, POOL, POLYHEDRON	TUNDRA, ETANG, SOUS-POLYÈDRE
RAPIDS, FALLS, RAPIDS	RAPIDS, CHUTES, RAPIDS
FORESHORE FLATS	ESTRANS
ROCKINGSTONE	ROCHE
DAM	BARRAGE
QUAY	QUAI
FOSSE	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
MINOR MATTE CONTOUR, STONE (CARBONACE)	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBES DE CUVETTE
POINT ELEVATION APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ROCKINGSTONE	ESSER
PIEDMONT	PIED
SAND DUNE	SABLE, DUNE
FALSA BOB	FAÏTSE
WOODED AREA, BUDGED, BEDMENTS	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



REVISION

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9
QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

104 H/5	104 H/6	104 H/7
104 H/4	104 H/3	104 H/2
104 A/13	104 A/14	104 A/15

La valeur magnétique en 1975 est à 29'14" (520 mms) EST au NORD DU QUADRILLAGE.

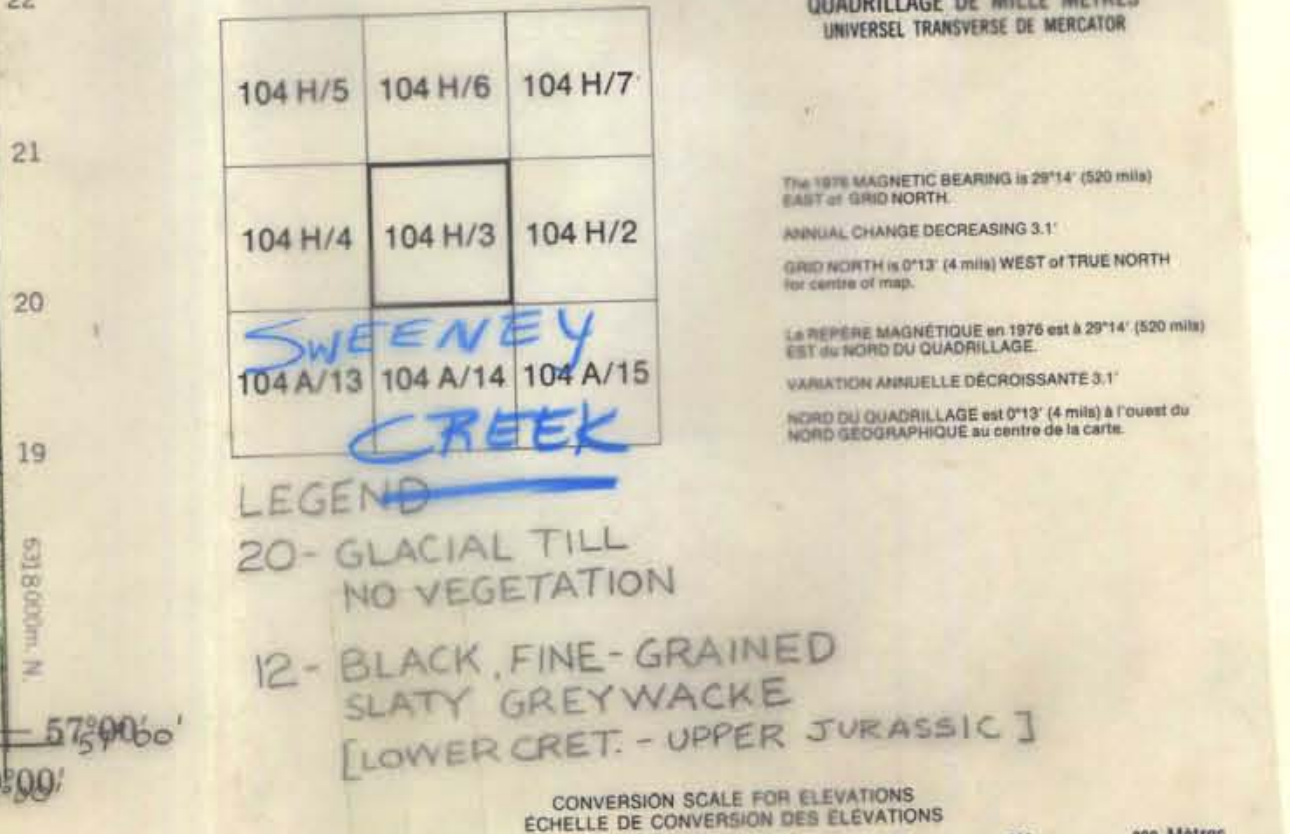
ANNUEL CHANGE DECREASING 3.1'

GRID NORTH is 0'13" (4 mms) WEST OF TRUE NORTH for center of map.

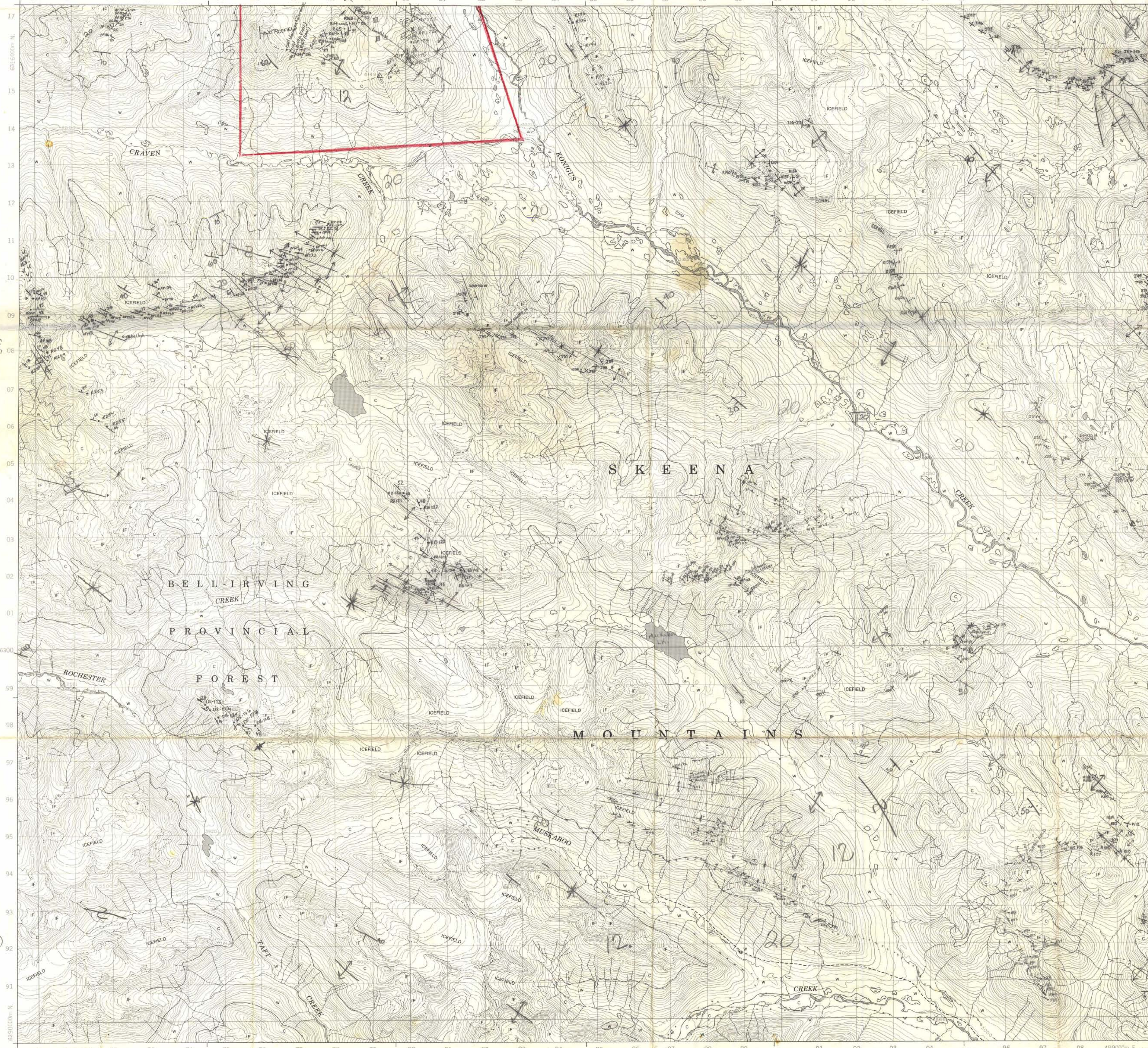
La valeur magnétique en 1975 est à 29'14" (520 mms) EST au NORD DU QUADRILLAGE.

VARIATION ANNUELLE DÉCROISSANTE 3.1'

NORD DU QUADRILLAGE est 0'13" (4 mms) à l'ouest du NORD GÉOGRAPHIQUE au centre de la carte.



595

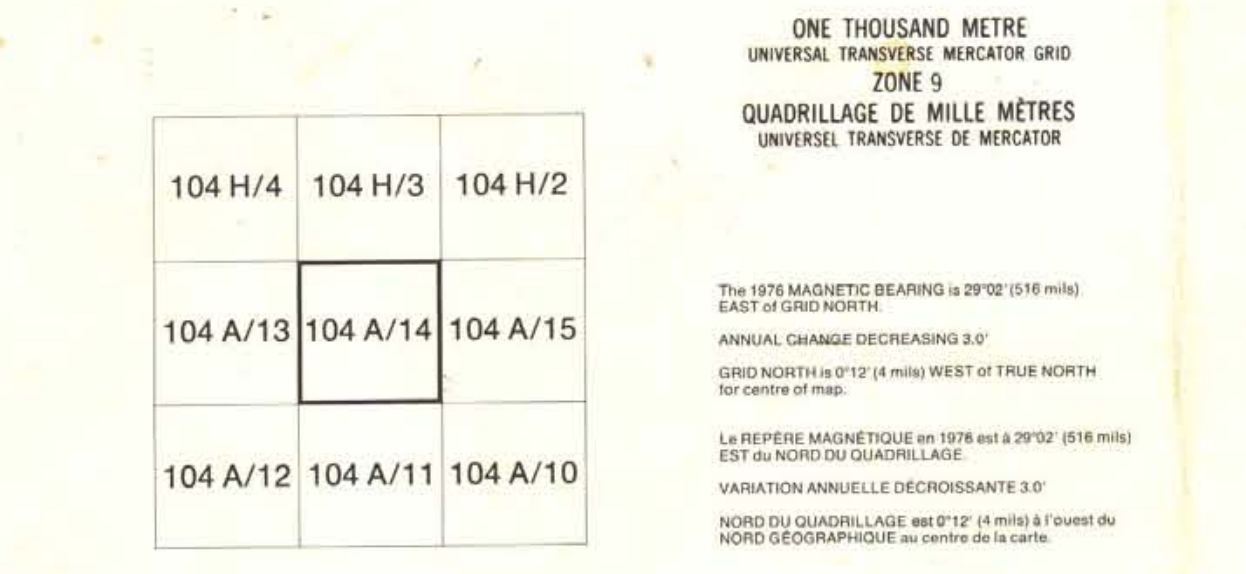
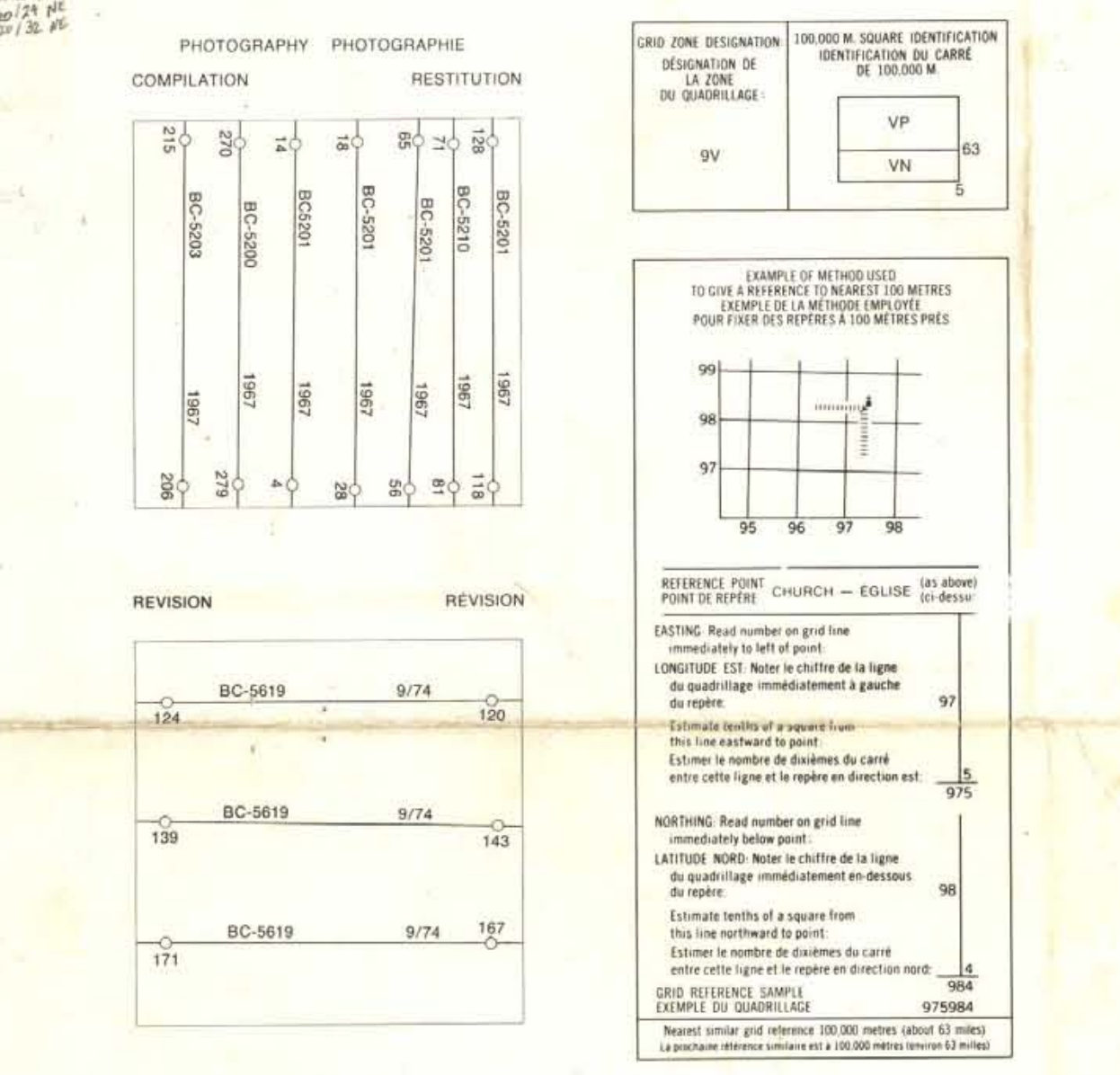


bloom □
float △
outcrop ○

20 - Around river systems
is Lill
12 - geoglyphs (main
confluence)

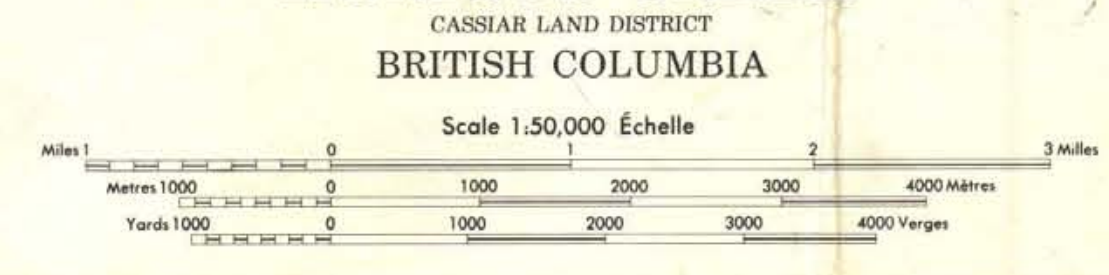
LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHÉMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PISTON, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIGNAL, STATION, STOP	CHÉMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	PUITS, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
RAILROAD	RAIL
QUARRY, EMBANKMENT	DÉBLAI, REMBLAI
GRAVEL PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNES FRONTIÈRES
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH-SURVEYED, UNSURVEYED	CANTON, PAROISSE, APPENTÉE, NON APPENTÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPENTÉE, NON APPENTÉE
- SECTION CORNERS	- COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANNIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE: LAND, WATER	POINT COTÉ, PRÉCIS: SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHOWING DIRECTION	COURS D'EAU, RIV. IMPÉCHÉE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP (WOODED)	MARAIS, MARÉCAIS (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TAIN AVEC CHENAUX
SAND, ABOVE, IN WATER	SABLE, AU-DESSUS, DANS L'EAU
STRONG BOGS	MARÉCAIS EN ENFILADE
TUNDRA, PONDS, POLYGENS	TOUNDRA, ÉTANGS, SOLS POLYGENAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
POSSIBLE	FOSSÉ
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE: LAND, WATER	POINT COTÉ, APPROXIMATIF: SUR TERRE, SUR L'EAU
ESKER	ESKER
FRIGO	FRIGO
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



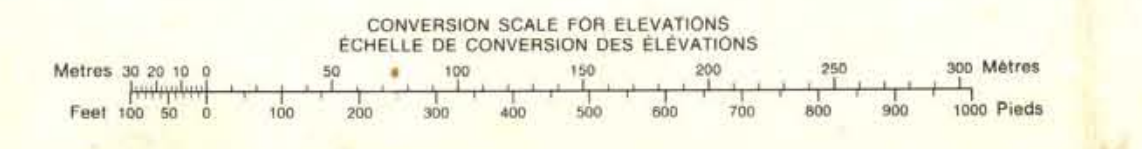
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ON PUBLICATION LIST NUMBER 104 A/14.

CONTOUR INTERVAL: 100 FEET
ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION



EQUIDISTANCE DES COURBES: 100 PIEDS
ELEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1974.
RÉVISÉ PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLLABORATEUR BRITANNIQUE, 1971 PAR PHOTOGRAPHIE AÉRIENNE ET LÈVES SUR LE TERRAIN 1968, 1967.
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LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
GRAVEL	GRAVIER
LOOSE SURFACE	CHEMIN DE TERRE, D'HIVER
CARTON ROAD, WINTER ROAD	SENTIER PERÇÉ, PORTAGE
TRAIL, CUT LINE, PORTAGE	AGGLOMERATION
BUILT-UP AREA	CHEMIN DE FER, VOIE D'ÉVITEMENT, SANS ARRÊT
RAILWAY, SIGNAL, STATION, STOP	PORT
BRIDGE	HYDROÉLECTRIQUE, MOULAGE
SEAPLANE BASE, ANCHORAGE	MARCHEMÈTRE
SEALED BANK, WEIR	POINTS DE REPÈRE
LANDMARK FEATURES	MARQUE DÉLIMITAIRE
HORSE SHED, GRAIN POINT	ÉGLISE, ÉGLISE
CHURCH, SCHOOL	BUREAU DE POSTE
POST OFFICE	LIEU HISTORIQUE
HISTORICAL SITE	TOURS, FEU, RADIO
TOWERS, FIRE, RADIO	PUTS, PÉTROLE, GAZ
WELL, OIL, GAS	RESSOURCES: PÉTROLE, ÉNERGIE, EAU
TANK, OIL, GASOLINE, WATER	LIÈGE TÉLÉPHONIQUE
TELEPHONE LINE	LIÈGE DE TRANSPORT D'ÉNERGIE
POWER TRANSMISSION LINE	MINE
MINE	DÉBLAI, REMBLAI
CUTTING, EMBANKMENT	GRAVIERE
GRAVEL PIT	FRONTIÈRES ET POINTS DE RÉFÉRENCES
BOUNDARIES AND SURVEY CONTROL	INTERNATIONALE, PROVINCIALE
INTERNATIONAL, PROVINCIAL	BORNE FRONTIÈRE
BORDER, BOUNDARY, SIGNPOST	COMTE, DISTRICT
COUNTY, DISTRICT	CANTON, PAROISSE: APPRÉHÉE, NON APPRÉHÉE
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	UNSURVEYED
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	SECTION CORNERS
MUNICIPALITY	REPÈRE PLANIMÉTRIQUE
WATER RESERVE, PARK, ETC.	REPÈRE DE NIVELLEMENT AVEC COTE
AGRICULTURAL, GRAIN POINT	POINT CÔTÉ, PRÉCIS, SUR TERRE, SUR L'EAU
BENCH MARK WITH ELEVATION	DRAINAGE ET OUVRAGES CONNEXES
SPOT ELEVATION, PRECISE, LAND, WATER	COURS D'EAU, RIVE, IMPRÉCISE
DRAINAGE AND RELATED FEATURES	DIRECTION DU COURANT
STREAM, SHORELINE, INDEFINITE	LAC, LAC INTERMÉDIAIRE
DIRECTION OF FLOW	TERRAIN INONDÉ
LAKE, INTERMEDIATE, LANE	MARSH, SWAMP (WOODS)
FLOODED LAND	LIT DE COURS D'EAU TARRÉ AVEC CHEVAUX
MARSH, SWAMP (WOODS)	SABLE, AU DESSUS, DANS L'EAU
DIRTY RIVER BED WITH CHANNELS	MANÉGE EN ENFILADE
SAND, ABOVE, IN WATER	TUNDRA, PONDS, POLYGLAIS
STRING BOG	RAPIDS, FALLS, RAPIDS
TUNDRA, PONDS, POLYGLAIS	ESTRAN
RAPIDS, FALLS, RAPIDS	ROCHE
FRESHWATER FLATS	BARRAGE
ROCK	QUAI
DAM	FOSSÉ
WHARF	RELIEF FEATURES
DITCH	CONTOURS
RELIEF FEATURES	COURBES DE NIVEAU
CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
APPROXIMATE CONTOURS	COURBES DE CONNETTE
DEPRESSION CONTOUR	POINT CÔTÉ, APPROXIMATIF, SUR TERRE, SUR L'EAU
SPOT ELEVATION, APPROXIMATE, LAND, WATER	ESKER
ESKER	PINGO
PINGO	SABLE, SAND DUNES
SAND, SAND DUNES	PALSE
SAND, SAND DUNES	RÉGION BOISÉE
SAND, SAND DUNES	RÉGION DÉBOISÉE
SAND, SAND DUNES	
WOODED AREA	
CLEARING AREA	

PHOTOGRAPHY	PHOTOGRAPHIE
COMPILED	RESTITUTION
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1:25,000	1:25,000
1:12,500	1:12,500
1:6,250	1:6,250
1:3,125	1:3,125
1:1,562	1:1,562
1:781	1:781
1:390	1:390
1:195	1:195
1:97	1:97
1:48	1:48
1:24	1:24
1:12	1:12
1:6	1:6
1:3	1:3
1:1.5	1:1.5
1:0.75	1:0.75
1:0.375	1:0.375
1:0.187	1:0.187
1:0.094	1:0.094
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1:0.012	1:0.012
1:0.006	1:0.006
1:0.003	1:0.003
1:0.001	1:0.001
1:0.000	1:0.000

104 H/4	104 H/3	104 H/2
104 A/13	104 A/14	104 A/15
104 A/12	104 A/11	104 A/10

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

This 1978 MAGNETIC BEARING is 29'10" (516 mils) EAST of GRID NORTH ANNUAL CHANGE DECREASING 3.0" GRID NORTH is 0'12" (4 mils) WEST of TRUE NORTH for centre of map.

La REPERE MAGNÉTIQUE en 1978 est à 29'10" (516 mils) EST du NORD DU QUADRILLAGE ANNUELLE CHANGE DÉCROISSANTE 3.0" NORD DU QUADRILLAGE est 0'12" (4 mils) à l'ouest du NORD GÉOGRAPHIQUE au centre de la carte.

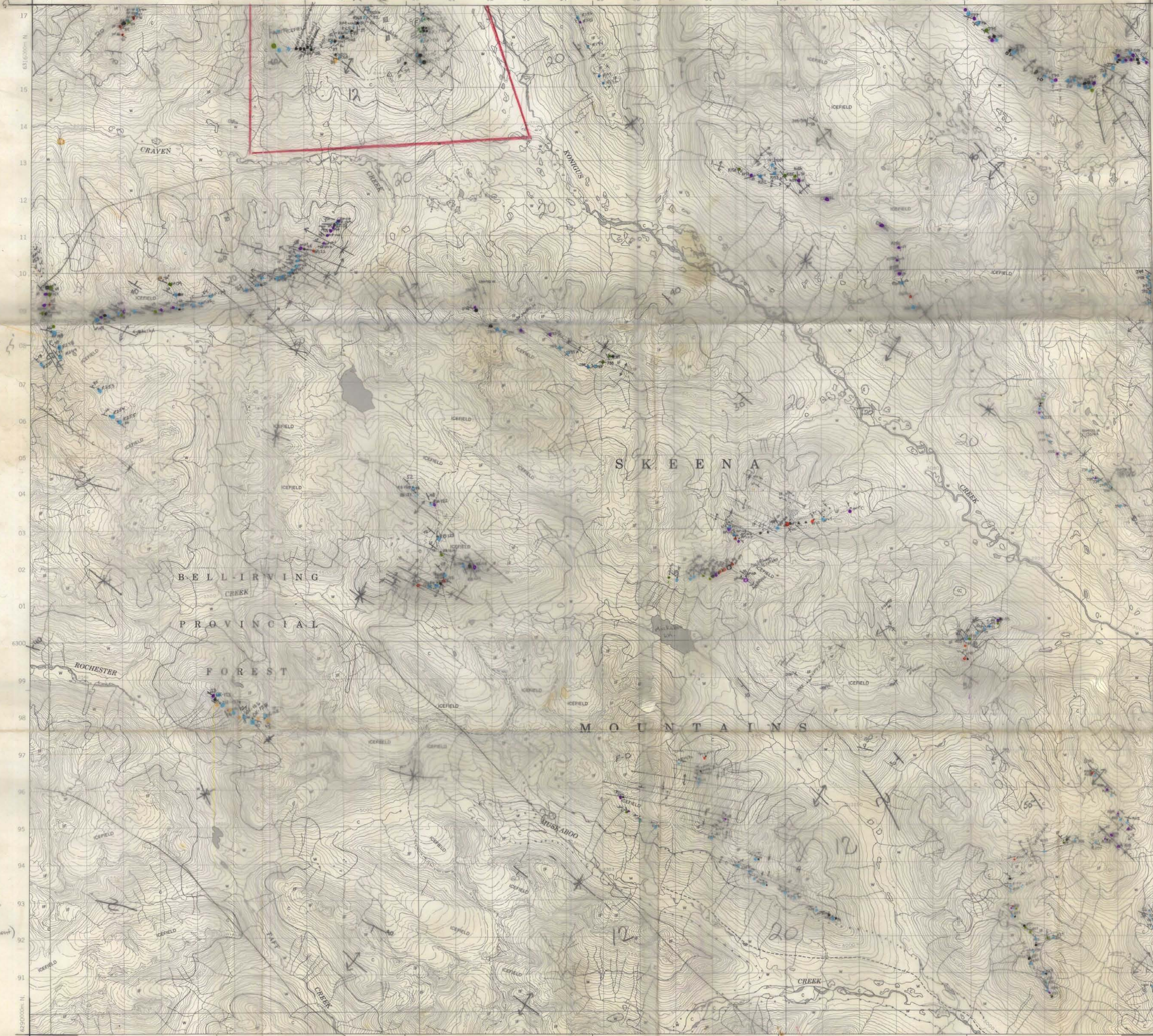
CONVERSION SCALE FOR ELEVATIONS ÉCHELLE DE CONVERSION DES ÉLEVATIONS

Metres 0 100 200 300 400 500 600 700 800 900 1000

Feet 0 100 200 300 400 500 600 700 800 900 1000

bloom □
float ▲
outcrop ○

20 - Around river system to left
12 - vegetation (main consistent)



KONIGUS CREEK
CASSIAR LAND DISTRICT
BRITISH COLUMBIA

Scale 1:50,000 Échelle

1:50,000

1:25,000

1:12,500

1:6,250

1:3,125

1:1,562

1:781

1:390

1:195

1:97

1:48

1:24

1:12

1:6

1:3

1:1.5

1:0.75

1:0.375

1:0.187

1:0.094

1:0.047

1:0.023

1:0.012

1:0.006

1:0.003

1:0.001

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ÉTABLI PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1978.

RÉVISÉ ET CORRIGÉ PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLOMBIE-BRITANNIQUE, 1971 PAR PHOTOGRAPHIE AÉRIENNE ET LÈVES SUR LE TERRAIN 1966, 1967.

DES CARTES SONT EN VENTE AU NIVEAU DES UNITÉS DU C.M.A.M. MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA OU CHEZ LE VENDEUR LE PLUS PRÈS.

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795



LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERÇÉE, PORTAGE
RAILROAD	RAILROAD
RAILWAY, SIGNAL, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTES
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OIL, GAS	Puits, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
OUTLINE, EMBANKMENT	DÉGEL, REMBLAI
GRAVELY PIT	GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, SCÈNE FRONTIÈRE
COUNTY, DISTRICT	COMITÉ, DISTRICT
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	CANTON, PAROISSE - ARPENTÉE, NON ARPENTÉE
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-ARPENTÉE, NON ARPENTÉE
SECTION CORNERS	COINS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC	RÉSERVE INDIENNE, PARC, ETC
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTÉ, PRÉCIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHALOW, INDEFINITE	COURS D'EAU, RIVE, INDEFINIE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODED	MARAIS, MARÉCAGE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TAIN AVEC CHENAUX
SAND, SANDY, IN WATER	SABLE, AU-DESSUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENLAIDE
TUNDRA, PONDS, POLYGONS	TOUNDRA, ETANGS, SOLS POLYGAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSÉ
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTÉ, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PIEDS	PIEDS
SAND, SANDDUNES	SABLE, DUNES
FALSA BOG	PAISE
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE

PHOTOGRAPHY PHOTOGRAPHIE

COMPILED RESTITUTION

GRID ZONE DESIGNATION 100,000 M SQUARE IDENTIFICATION OF QUADRILLAGE: WP WN

REVISION

REVISION

REFERENCE POINT CHURCH - ÉGLISE (as above) (en above)

EASTING: Read number on grid line immediately to left of point. LONGITUDE EST: Note le chiffre de la ligne de quadrillage immédiatement à gauche du repère.

Estimate bearing of a square from this line northward to point. Estimer le nombre de divisions du carré entre cette ligne et le repère en direction nord.

NORTHING: Read number on grid line immediately below point. LATITUDE NORTH: Note le chiffre de la ligne de quadrillage immédiatement en dessous du repère.

Estimate bearing of a square from this line southward to point. Estimer le nombre de divisions du carré entre cette ligne et le repère en direction sud.

GRID REFERENCE SAMPLE: 100,000 M SQUARE IDENTIFICATION: WP WN

Revised ortho grid reference (100,000 metres) (révisé) (100,000 mètres) (révisé)

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

104 H/3	104 H/2	104 H/1
104 A/14	104 A/15	104 A/16
104 A/11	104 A/10	104 A/9

The 1978 MAGNETIC BEARING is 28°30' (500 miles) EAST of GRID NORTH. ANNUAL CHANGE DECREASING 3.2". GRID NORTH is 0°13' (14 miles) EAST of TRUE NORTH 60° NORTH OF GRID.

La REPERE MAGNÉTIQUE en 1978 est à 28°30' (500 miles) EST DU GRID NORTH. VARIATION ANNUELLE DÉCROISSANTE 3.2". GRID NORTH est à 0°13' (14 miles) à l'est du NORD GÉOGRAPHIQUE au centre de la carte.

12 - graywackes
20 - glacial / glaciaire (creek beds)

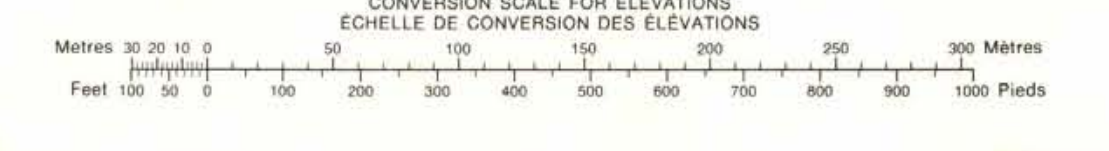
PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA. 1978. INFORMATION CURRENT AS OF 1974.

CONTOUR INTERVAL: 100 FEET ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL. NORTH AMERICAN DATUM 1927. TRANSVERSE MERCATOR PROJECTION.



ÉQUIDISTANCE DES COURBES: 100 PIEDS. ELEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER. SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927. PROJECTION TRANSVERSE DE MERCATOR.

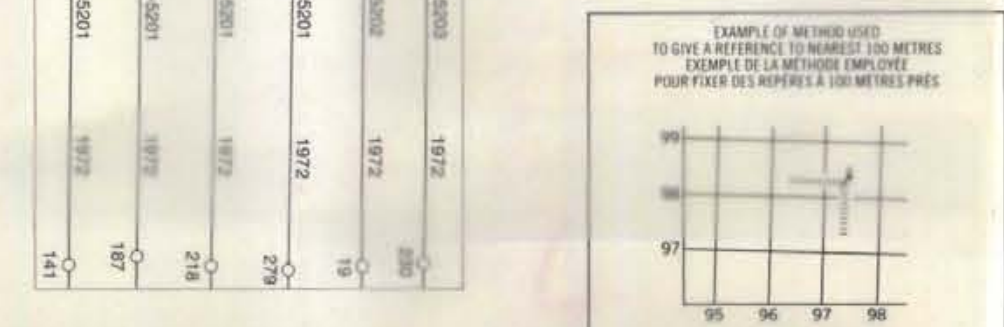
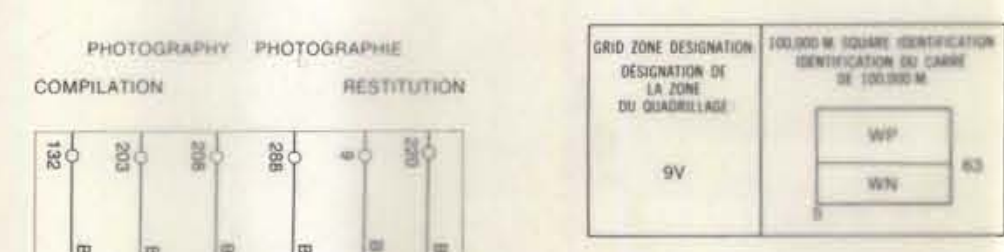
ÉTABLI PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1978. RENSEIGNEMENTS À JOUR EN 1974.



Military users, refer to this map as: Références de la carte pour usage militaire. MAP 104 A/15 SÉRIE ÉDITION 1 MCE ÉDITION

LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PÉNICEL, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIGNAL, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVÈNEMENT, GARE, ARRÊT
TOWER, FIRE, RADIO	POINT
SEAPLANE BASE, ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MANSION, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTES
HISTORICAL SITE	LIEN HISTORIQUE
TOWER, FIRE, RADIO	TOURS FEU, RADIO
WELL, OIL, GAS	Puits PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIÈNE DE TÉLÉPHONE
POWER TRANSMISSION LINE	LIÈNE DE TRANSPORT D'ÉNERGIE
RAILWAY	VOIE
CUTTING, EMBANKMENT	TRANCHÉE, REMBLAIS
GRAVELLY PIT	PIÈCE DE GRAVIER
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCES
INTERNATIONAL, PROVINCIAL	INTERNATIONALE, PROVINCIALE
COUNTY, DISTRICT	COMTE, DISTRICT
TOWNSHIP, PARISH, SURVEYED	CANTON, PAROISSE - APPRÉHENSÉ
UNSURVEYED	NON APPRÉHENSÉ
TOWNSHIP, DLS - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPRÉHENSÉ, NON APPRÉHENSÉ
SECTION CORNERS	CORNS DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC	RÉSERVE INDIENNE, PARC, ETC
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BEACH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PIERCE, LAND, WATER	POINT COTE, PIERCE SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, CHANNEL, WEIR	COURS D'EAU, RIVE, BARRAGE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODS	MARAIS, MARÉCHAGE (BOIS)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TAIN AVEC CHENAUX
SAND, ARCH, IN WATER	SABLE AU BORD, DANS L'EAU
STONES, BOB	MARÉCHAGE EN ENFILADE
TUNDRA, POND, POLYSTONE	TOUNDRA; ETANG, SOUS-POLYSTONE
RAPIDS, FALLS, RAPIDS	RAPIDS, CHUTES, RAPIDS
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
SWAMP	BOIS
RELIEF FEATURES	RELIEF
CONTOUR	COURBES DE NIVEAU
APPROXIMATE CONTOUR	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBES DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
POND	POND
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSA
WOODED AREA	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



REVISION	REVISION
BC-5626 9/74	115
119	97
BC-5626 9/74	148
144	96
BC-5626 9/74	161
166	95

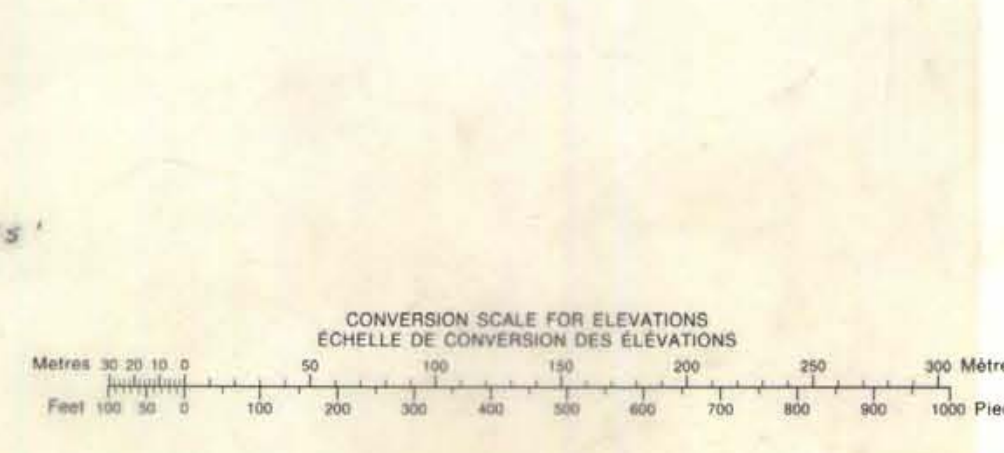
ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 9
QUADRILLAGE DE MILLE MÈTRES
UNIVERSAL TRANSVERSE DE MERCATOR

THEIR MAGNETIC BEARING IS 28°38' (2000 METRES)
EST OF GRID NORTH.

ANNUAL CHANGE DECREASING 3.2'
GRID NORTH IS 1°13' (4 METRES) EAST OF TRUE NORTH
FOR COURSE OF 100 METRES.

LA RÉSERVE MAGNÉTIQUE EN 1974 EST À 28°38' (2000 MÈTRES)
EST DU NORD DU QUADRILLAGE.

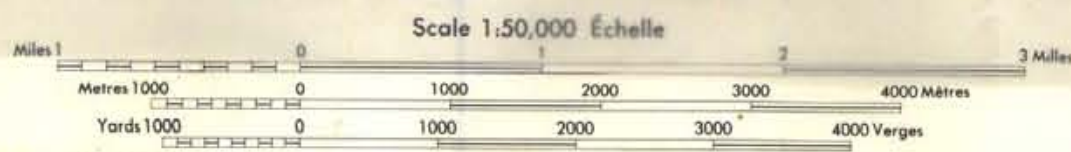
VARIATION ANNUELLE DÉCROISSANTE 3.2'
NORD DU QUADRILLAGE EST 1°13' (4 MÈTRES) À L'EST DU
NORD VÉRITABLE DÉCROISSANTE 3.2' EN COURSE DE 100 MÈTRES.



LEGEND
12 - greywackes
20 - glacial/fluviat till (creek beds)

795

MOUNT BEIRNES
CASSIAR LAND DISTRICT
BRITISH COLUMBIA



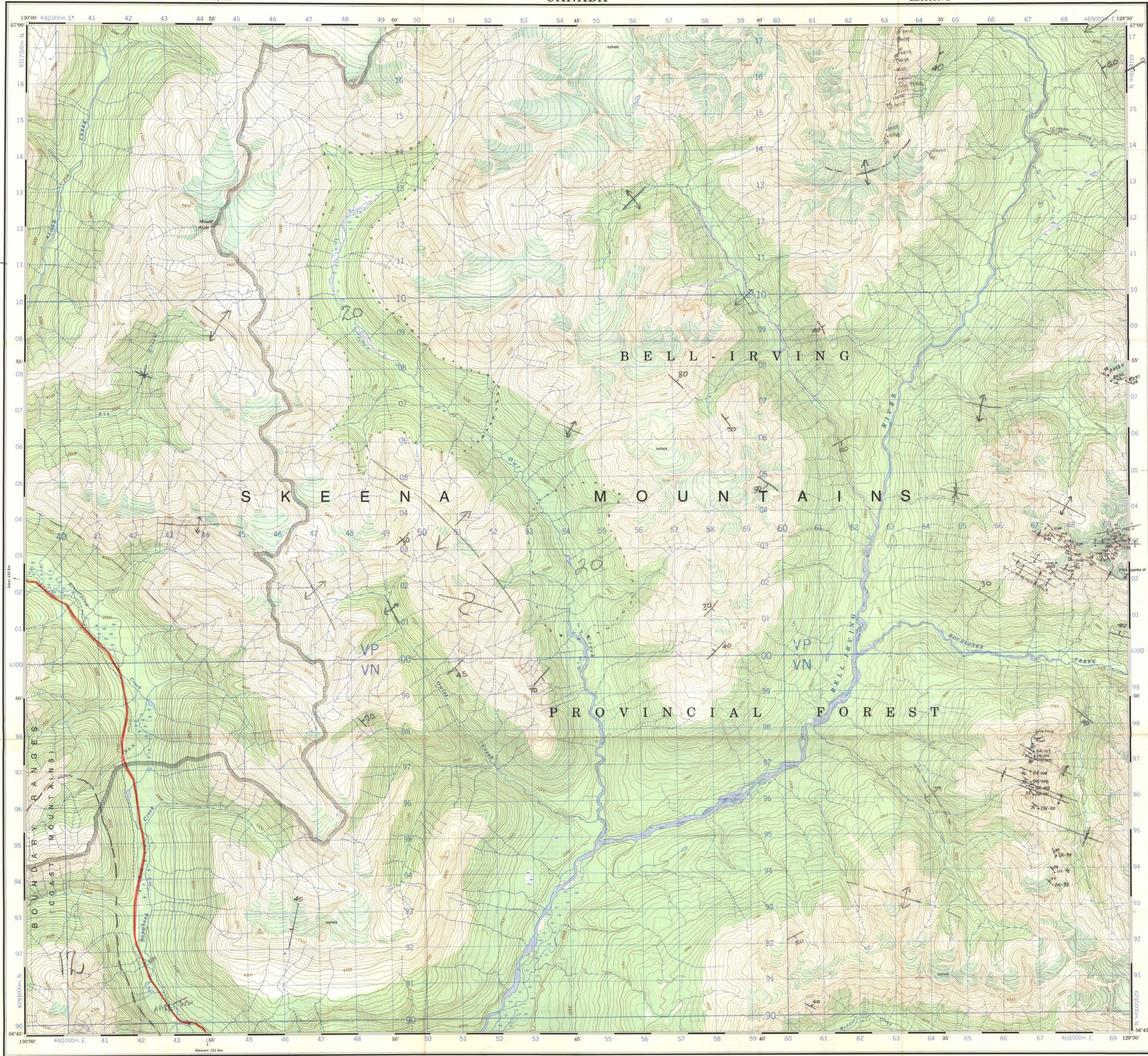
ÉTABLI PAR LA DIRECTION DES LÈVES ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, EN 1976. RENDUS EN VENTE AU BUREAU DES CARTES ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLONIE BRITANNIQUE, 1011, PAR PHOTOGRAPHIE AÉRIENNE ET LÈVES SUR LE TERRAIN EN 1976.

LES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR LE PLUS PRÈS.

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Military users, refer to this map as: **SÉRIE A 721 SÉRIE**
 Réference de cette carte pour usage militaire: **MAP 104 A/13 CARTE**
 ÉDITION 2 MCE ÉDITION

795

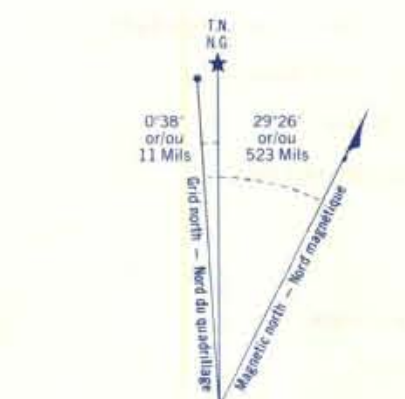


GLOSSARY GLOSSAIRE

- Arrière Terrain d'arriéré
 - Area Limite de ville
 - Customs Douane
 - Ditch Fosse
 - Dugout Abreuvoir
 - Dune Dune
 - Filtration Plant Usine de filtration
 - Gas Gaz
 - Gull Course Tapisin de gull
 - Junk Yard Ferraille
 - Kim For
 - Landfill Décharge
 - Moss Waste Débris de mousse
 - Oil Well Puits de pétrole
 - Park Parc
 - Rock Patinoire
 - Senior Citizens Home Éper de l'âge d'or
 - Site Area Station de site
 - String Bag Fabrica à filaments
 - Survey Line Ligne nivellement
 - Tank Réservoir
 - Water Eau
 - Water Road Canche d'eau
- For a complete glossary see reverse side
 Pour un glossaire complet, voir au verso

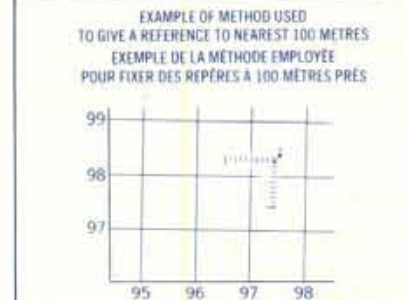
ABBREVIATIONS ABRÉVIATIONS

- Aband. Abandonné, de
- C. Cemetery Cimetière
- CO. County Comté
- C. Cleveuse Cléveuse
- F. Ferry Ferry
- H. Hospital Hôpital
- L. Lake Lac
- M. Municipality Municipalité
- P. Post Office Bureau de poste
- RA. Railway Railway
- RCMP. Royal Canadian Mounted Police Gendarmes Reines Canadiennes
- Res. Reservoir Réservoir
- Trans. Sta. Transformer Station Poste de transformateurs
- Tr. Trunk Line Tronc de ligne



Use diagram only to obtain numerical values
 APPRÉHENSION APPROXIMATIVE
 FOR CENTRE OF MAP
 ANNUAL CHANGE DECREASING 2.5"

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES TRANSVERSE UNIVERSEL DE MERCATOR



REFERENCE POINT CHURCH - BOLLING (see above)

EASTING: Road number on grid line immediately to left of point.
 LONGITUDE EST: Note the chiffre de la ligne de quadrillage immédiatement à gauche du repère.
 Estimate length of a square from this line eastward to point.
 Estimer le nombre de diamètres de carré entre cette ligne et le repère en direction est.

NORTHING: Road number on grid line immediately below point.
 LATITUDE NORD: Note the chiffre de la ligne de quadrillage immédiatement en dessous du repère.
 Estimate length of a square from this line northward to point.
 Estimer le nombre de diamètres de carré entre cette ligne et le repère en direction nord.

GRID REFERENCE: 975864
 RÉFÉRENCE AU QUADRILLAGE: 975864

Nearest similar grid reference: 975864 (62 metres)
 La plus proche référence semblable est à 100,000 mètres (62 mètres).

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

130°30'	129°00'	128°30'
104 A/11	104 A/12	104 A/13
104 A/10	104 A/11	104 A/12
130°00'	129°00'	128°30'

Surveyed and compiled by the SURVEYS AND MAPPING BRANCH, MINISTRY OF THE ENVIRONMENT, BRITISH COLUMBIA, 1971. Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, based on aerial photographs taken in 1972. Information current as of 1972.

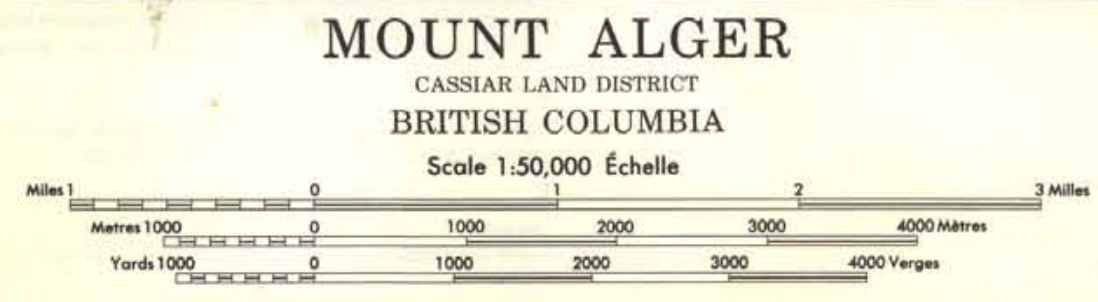
Copies may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, at your nearest map dealer.

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Roads: loose or stabilized surface, all weather - granier, agglomérés, boue saïson
 loose surface, dry weather - de gravier, temps sec
 unclassified streets - rues hors classe
 cart track - sentier, percée ou portage
 trail, cut line or portage - sentier, percée ou portage

Routes: 2 lines or more - 2 voies ou plus
 less than 2 lines - moins de 2 voies

FOR COMPLETE REFERENCE SEE REVERSE SIDE
 POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO



Scale 1:50,000 Échelle

CONVERSION TABLE: 100 FEET (Elevations in Feet show Mean Sea Level, North American Datum 1927, Transverse Mercator Projection)

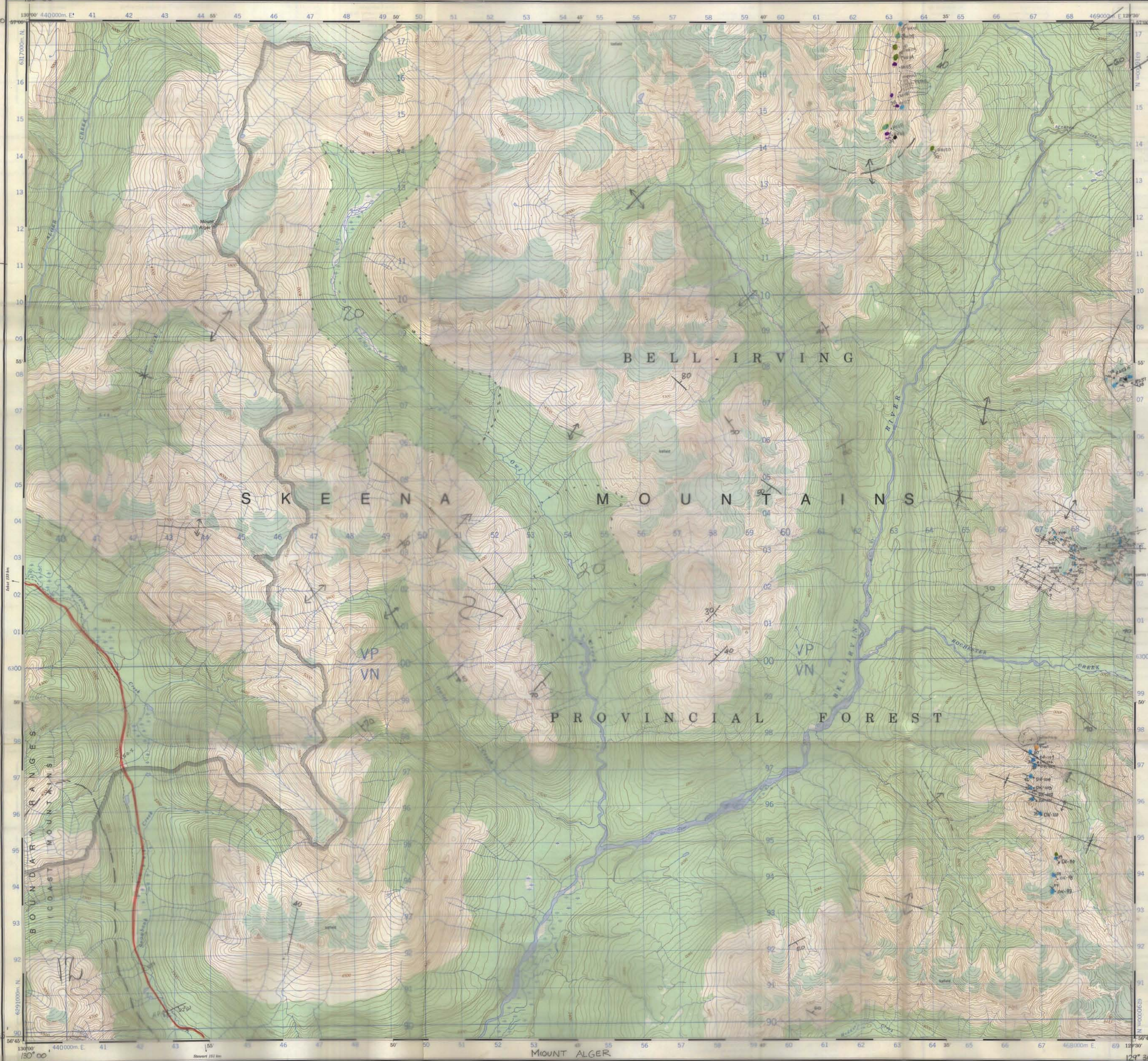
ÉCHELLE DE CONVERSION DES ÉLEVATIONS (Élevations en Pieds au-dessus du niveau moyen de la mer, Système de référence géodésique nord-américain, 1927, Projection Transverse de Mercator)

Scale and edition by the DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ENVIRONNEMENT, COLONIE BRITANNIQUE en 1971. Édition par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Mise à jour à l'aide de photographies aériennes prises en 1972. Remaniement à jour en 1972.

Ce carton est en vente au Bureau des Cartes du Canada, ministère de l'Énergie, des Mines et des Ressources, Ottawa, ou chez le vendeur de vos parts.

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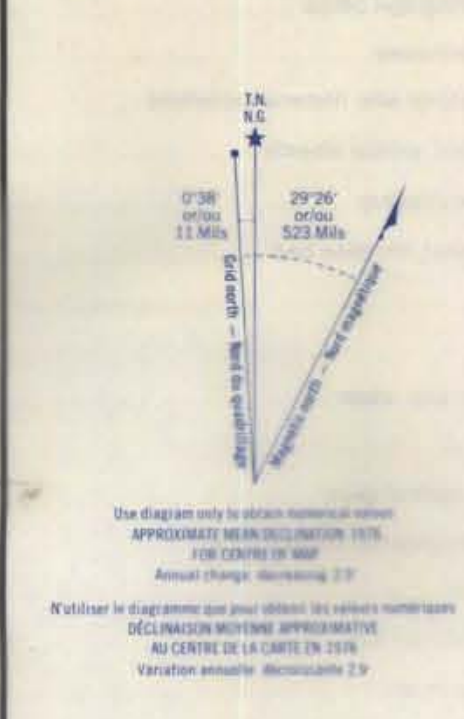
MOUNT ALGER
 104 A/13
 ÉDITION 2



Military users, refer to this map as: SÉRIE A 721 SÈRIE MAP 104 A/13 CARTE ÉDITION 2 M.C.E. ÉDITION

GLOSSARY GLOSSAIRE. Table with two columns: English and French terms for various map symbols and features.

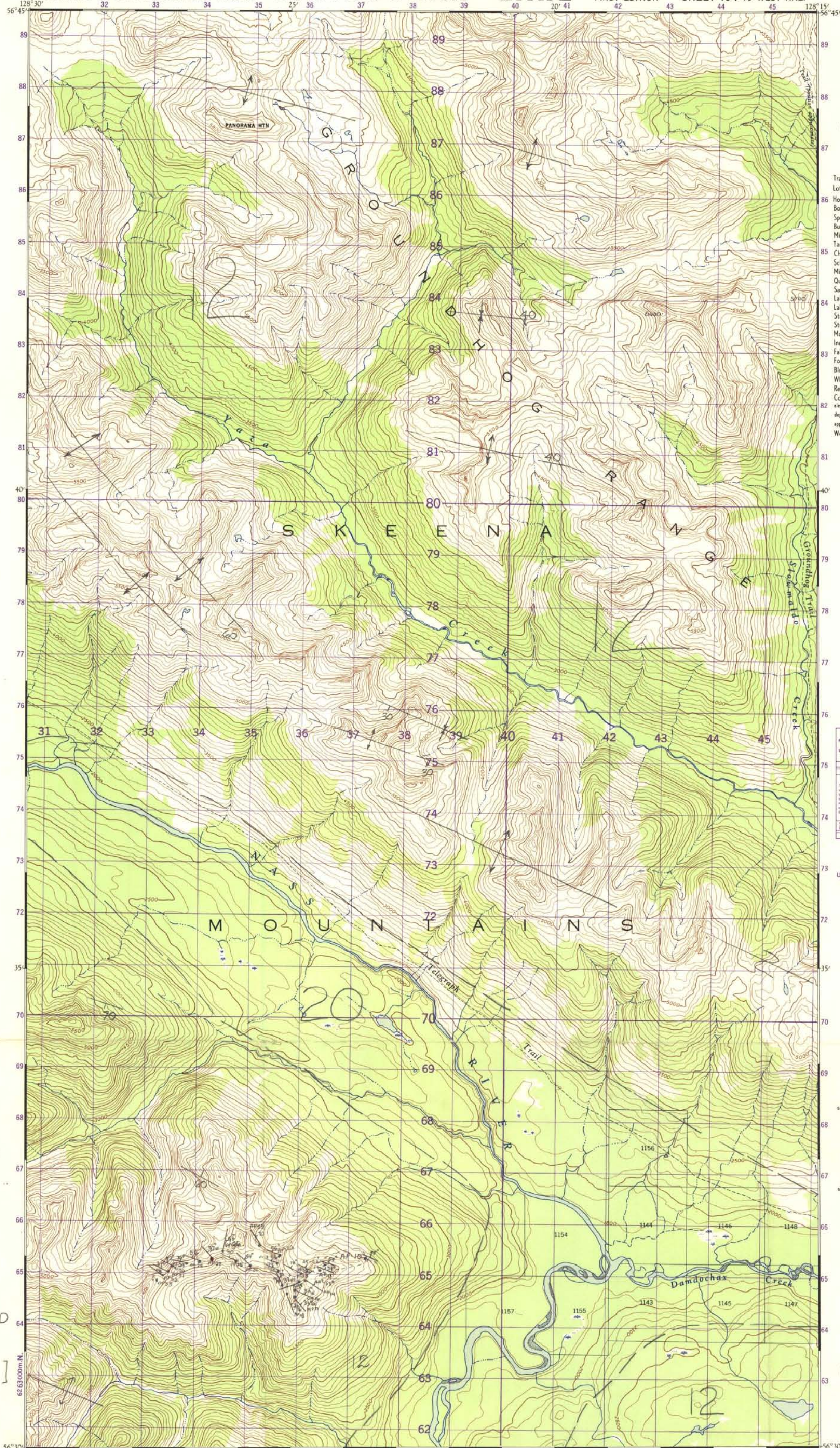
ABBREVIATIONS ABRÉVIATIONS. Table with two columns: English and French abbreviations for map features.



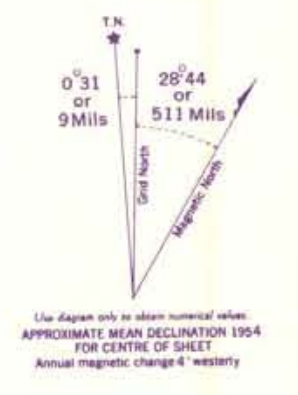
- LEGEND FOR COLOR CODING
CONGLOMERATE (FLUVIAL-DELTAIC)
SANDSTONE
SILTSTONE
SHALE, MUDSTONE (CARBONACEOUS)
PLANT FOSSILS
COAL, bloom, float, outcrop
INTERBEDDED SEDIMENTS
CROSS BEDDED SEDIMENTS
MARINE
LITTORAL SEDS - shellfish, beach cgl
SHALLOW MARINE

77795

Refer to this Map as: 104 1/2 W EDITION 1 ASE



- REFERENCE
- Trail
 - Lot Line and Number
 - Horizontal Control Point
 - Boundary Mon.
 - Spot Elevation, (n feet)
 - Building
 - Mill or Factory, small, Sawmill, etc.
 - Tank, Gas, Oil or Water
 - Church, Cemetery
 - School, Post Office
 - Mine or Open Cut
 - Quarry
 - Sand Dunes
 - Lake, intermittent or Pond
 - Lake or Shoreline, indeterminate
 - Stream, intermittent or dry
 - Stream, indeterminate
 - Marsh or Swamp
 - Inundated Land
 - Falls, Rapids
 - Foreshore Flats
 - Bluff, Cliff or Escarpment
 - Wharf or Pier
 - Reef, Rock or Small Island
 - Contours:
 - elevation
 - depression
 - approximate
 - Wooded Area

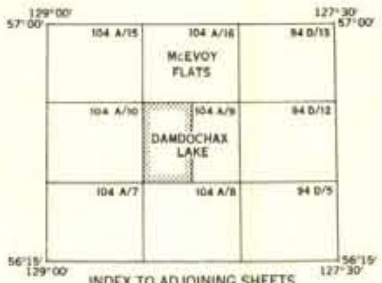


TO ONE GRID REFERENCE ON THIS SHEET FIGURES, USE THE SMALLER FIGURES PRINTED ON THE MARGIN OR ON THE FACE OF THE MAP. USE 0 32 FOR THE STANDARD MILITARY GRID REFERENCE.

EAST		NORTH	
Use west edge of square or whole number, and read on the scale on the right.	43	Use north edge of square or whole number, and read on the scale on the right.	67
For more exact location, use the 100-foot scale on the left of the map.	2	For more exact location, use the 100-foot scale on the right of the map.	4
East	43 2	North	67 4
STANDARD MILITARY GRID REFERENCE	432674	STANDARD MILITARY GRID REFERENCE	674

STANDARD MILITARY GRID REFERENCE: 432674 (Easting), 674 (Northing). Mean sea level reference: 100,000 Meters. Approximate 53 Miles.

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9



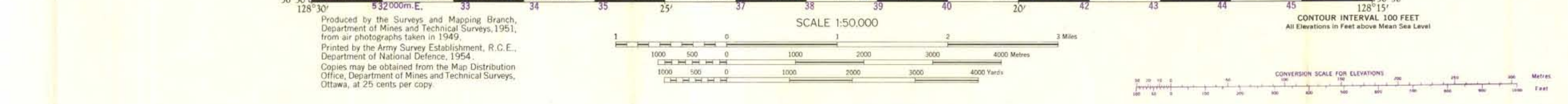
MAGNETIC DECLINATION 29' 15" EAST AT CENTRE OF SHEET 1954. Annual magnetic change 4' westerly.

DAMDOCHAX LAKE BRITISH COLUMBIA 104 1/2 WEST HALF FIRST EDITION

LEGEND

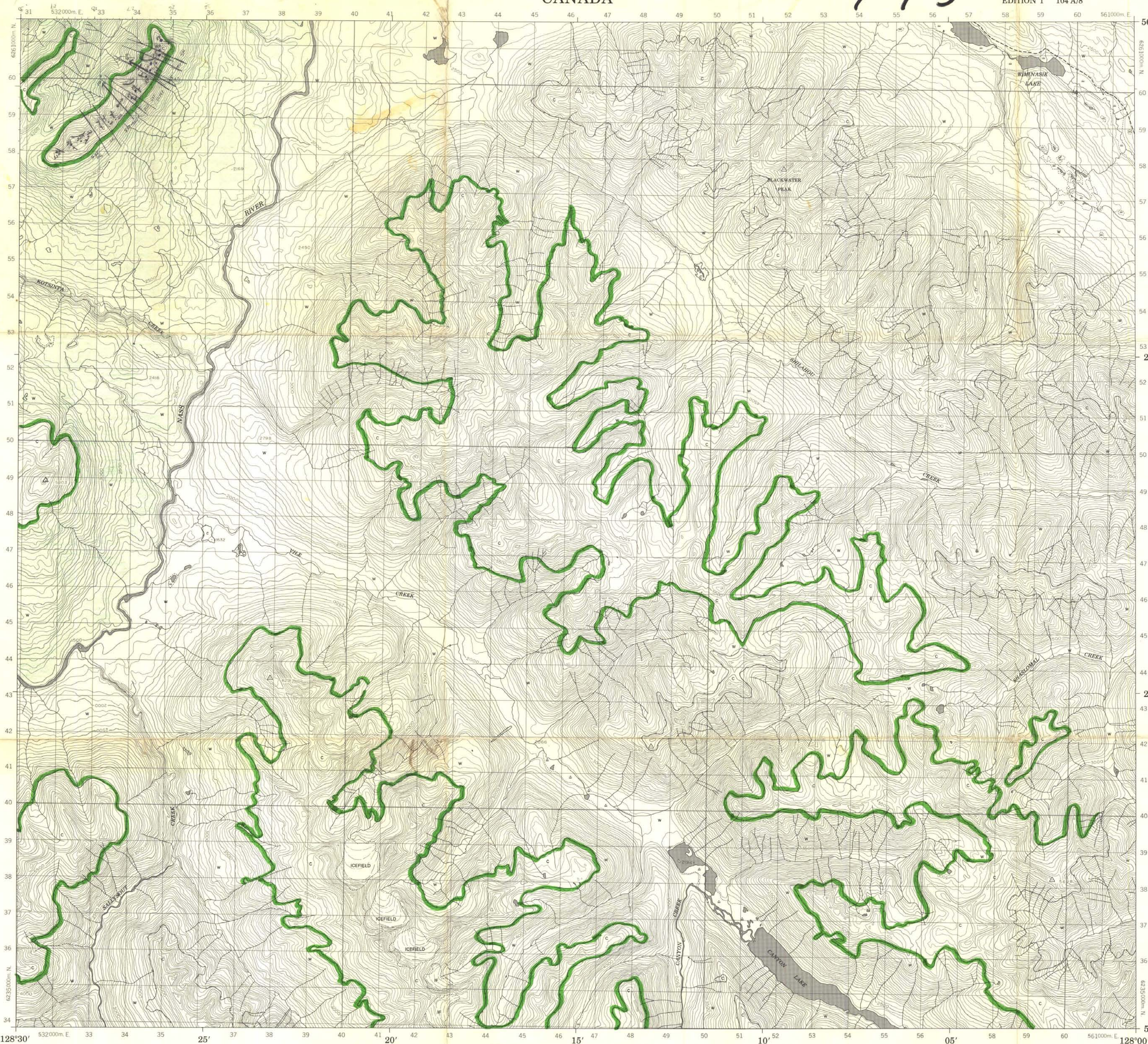
20- GLACIAL TILL
NO VEGETATION

12- BLACK, FINE-GRAINED
SLATY GREYWACKE
[LOWER CRET.- UPPER
JURASSIC]



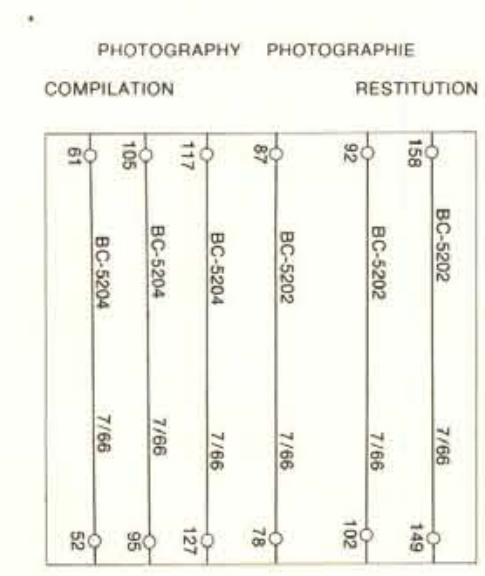
Produced by the Surveys and Mapping Branch, Department of Mines and Technical Surveys, 1951, from air photographs taken in 1949. Printed by the Army Survey Establishment, R.C.E., Department of National Defence, 1954. Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa, at 25 cents per copy.

795



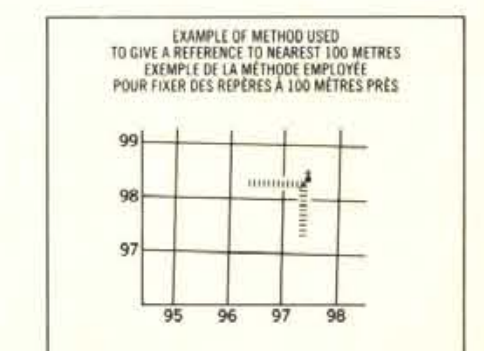
LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	CHENIER, PERÇEE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	PONT
SEAPLANE ANCHORAGE	HYDROAÉROPORT, MOULAGE
LANDMARK FEATURES	POINTS DE REPÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS, FIRE, RADIO	TOURS, FEU, RADIO
WELL, OR, GAS	Puits, PÉTROLE, GAZ
TANK, OIL, GASOLINE, WATER	RÉSERVOIR, PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINE
CUTTING, EMBANKMENT	DÉVAL, REMBLAI
GRAVEL PIT	GRAVIERÈRE
BOUNDARIES AND SURVEY CONTROL	FRONTIÈRES ET POINTS DE RÉFÉRENCE
INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT	INTERNATIONALE, PROVINCIALE, BORNE FRONTIÈRE
COUNTY, DISTRICT	COMTÉ, DISTRICT
TOWNSHIP, PARISH, SURVEYED	CANTON, PAROISSE, APPRÉNTÉE
UN-SURVEYED	NON APPRÉNTÉE
TOWNSHIP, DLS - SURVEYED, UN-SURVEYED	TOWNSHIP, ATC-APPRÉNTÉE, NON APPRÉNTÉE
-SECTION CORNERS	-CORNES DE SECTION
MUNICIPALITY	MUNICIPALITÉ
INDIAN RESERVE, PARK, ETC.	RÉSERVE INDIENNE, PARC, ETC.
HORIZONTAL SURVEY POINT	REPÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	REPÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECIS: LAND, WATER	POINT COTÉ, PRÉCIS: SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
STREAM, SHORELINE: INDEFINITE	COURS D'EAU, RIVE, IMPRÉCISE
DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, LAC INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODS	MARAIS, MARÉCAGE (BOISÉ)
DRY RIVER BED WITH CHANNELS	LIT DE COURS D'EAU TARI AVEC CHENAUX
SAND, ABOVE IN WATER	SABLE: AU DESSUS, DANS L'EAU
STRING BOG	MARÉCAGE EN ENFLADE
TUNDRA, PONDS, POLYGONS	TOUNDRA, ETANGS, SOLS POLYGONAUX
RAPIDS, FALLS, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHE
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSÉ
RELIEF FEATURES	RELIEF
APPROXIMATE CONTOURS	COURBES DE NIVEAU
DEPRESSION CONTOUR	COURBES DE NIVEAU APPROXIMATIVES
SPOT ELEVATION, APPROXIMATE: LAND, WATER	POINT COTÉ, APPROXIMATIF: SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
PALSA BOG	PALSA
WOODS, ANGLE	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



REVISION

200	BC-5619	9/74	200
25	BC-5604	9/74	29
39	BC-5604	9/74	35
88	BC-5604	9/74	92



REFERENCE POINT CHURCH - EGLISE (in sheet) POINT DE REPÈRE

(EASTING: Read number on grid line immediately to left of point)
LONGITUDE (EST: Note on chart of the figure the quadrillage immediately to the right of point)
Estimate tenths of a square from this line eastward to point
Estimate the number of squares to the east of this line and the number in direction east.

(NORTHING: Read number on grid line immediately below point)
LATITUDE (NORD: Note on chart of the figure the quadrillage immediately below point)
Estimate tenths of a square from this line northward to point
Estimate the number of squares to the north of this line and the number in direction north.

GRID REFERENCE SAMPLE EXEMPLE DU QUADRILLAGE 97994

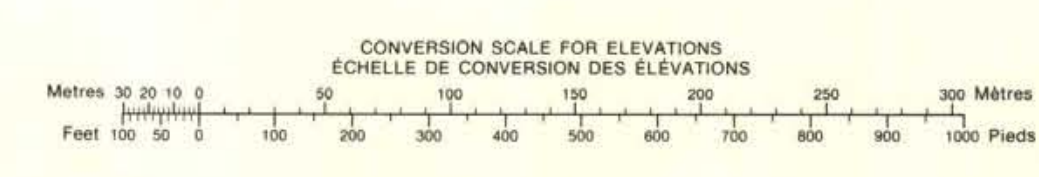
Number of grid squares 100,000 metres (about 62 miles) La parcelle dérivée contient est à 100,000 mètres (environ 62 milles)

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 9 QUADRILLAGE DE MILLE MÈTRES UNIVERSAL TRANSVERSE DE MERCATOR

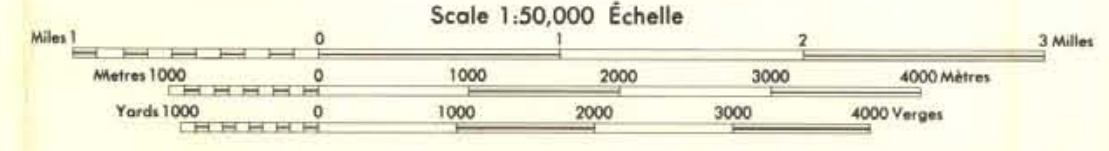
104 A/10	104 A/9	94 D/12
104 A/7	104 A/8	94 D/5
104 A/2	104 A/1	94 D/4

The 1974 MAGNETIC BEARING is 27°48' (494 min) EAST OF GRID NORTH ANNUAL CHANGE DECREASING 3.3 GRID NORTH is 2°37' (11 min) EAST OF TRUE NORTH for centre of map.

La REPERE MAGNÉTIQUE en 1974 est à 27°48' (494 min) EST DU NORD DU QUADRILLAGE ANNUELLE DÉCROISSANTE 3.3 VARIATION ANNUELLE DÉCROISSANTE 3.3 NORD DU QUADRILLAGE est à 2°37' (11 min) à l'est du NORD GÉOGRAPHIQUE au centre de la carte.



BLACKWATER PEAK
CASSIAR LAND DISTRICT
BRITISH COLUMBIA

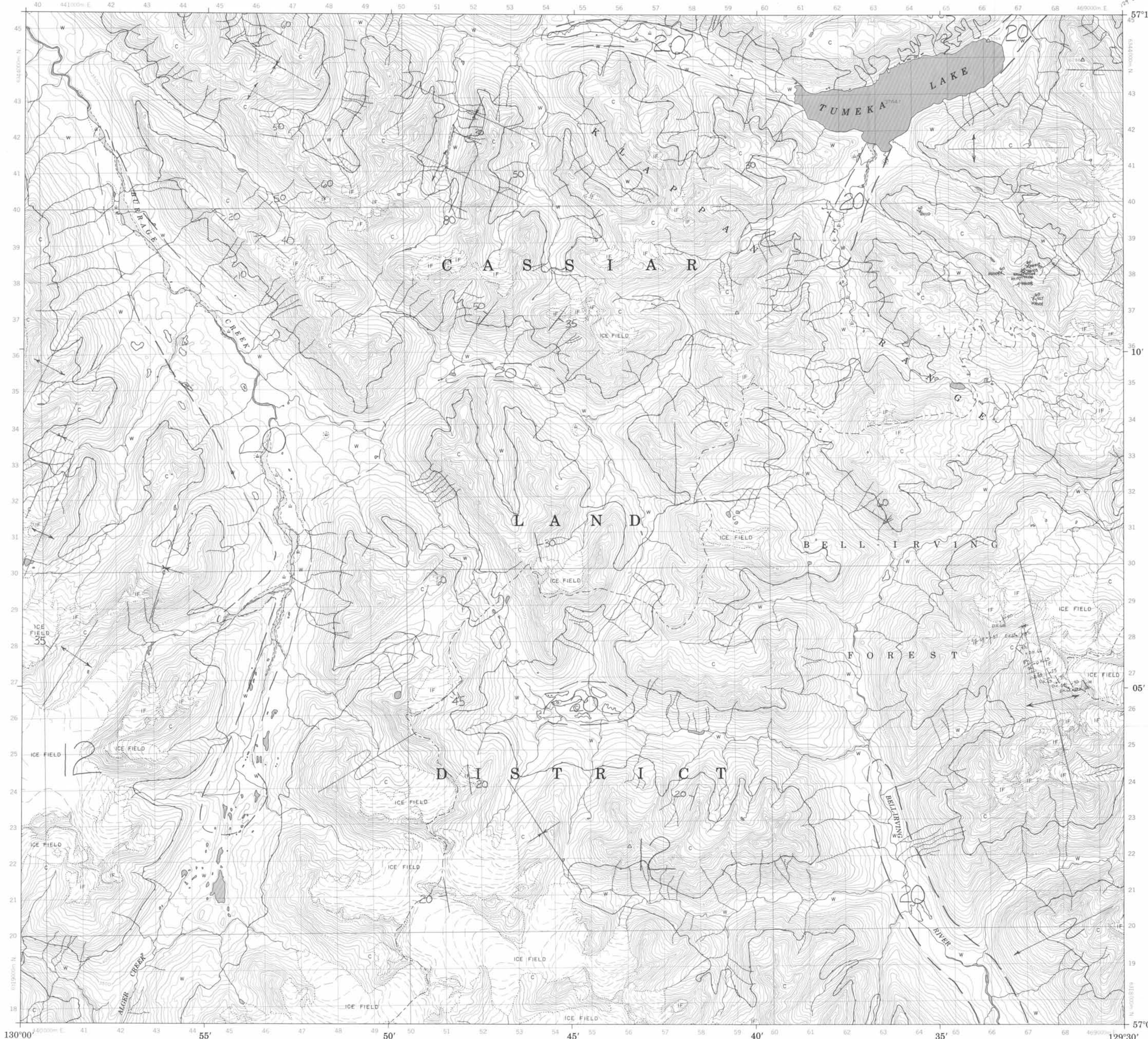


EQUIDISTANCE DES COURBES 100 PIEDS
ÉLEVATIONS EN PIEDS AU-DESSUS DU NIVEAU MOYEN DE LA MER
SYSTÈME DE RÉFÉRENCE GÉOCSÉQUE NORD-AMÉRICAIN 1927
PROJECTION TRANSVERSE DE MERCATOR

ÉTABLI PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DES TERRES, COLONISATIONS ET DÉVELOPPEMENT RURAL EN 1976
REÇUE PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, SERVICE DES TERRES, COLONISATIONS ET DÉVELOPPEMENT RURAL EN 1988 ET 1991
Ces cartes sont en vente au bureau des cartes du Canada, Ministère de l'Énergie, des Mines et des Ressources, Ottawa, ou chez le vendeur le plus près.

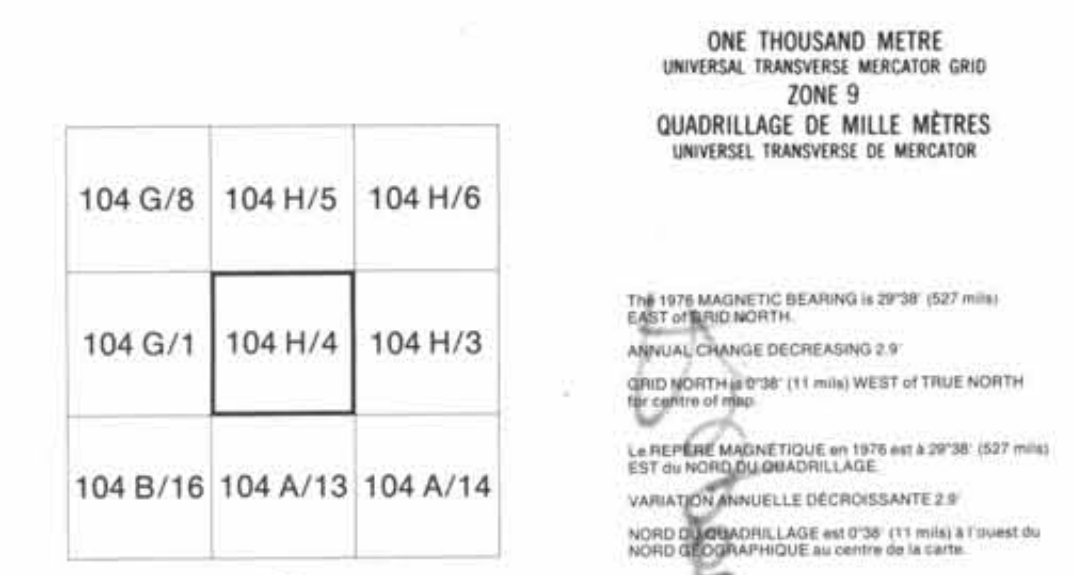
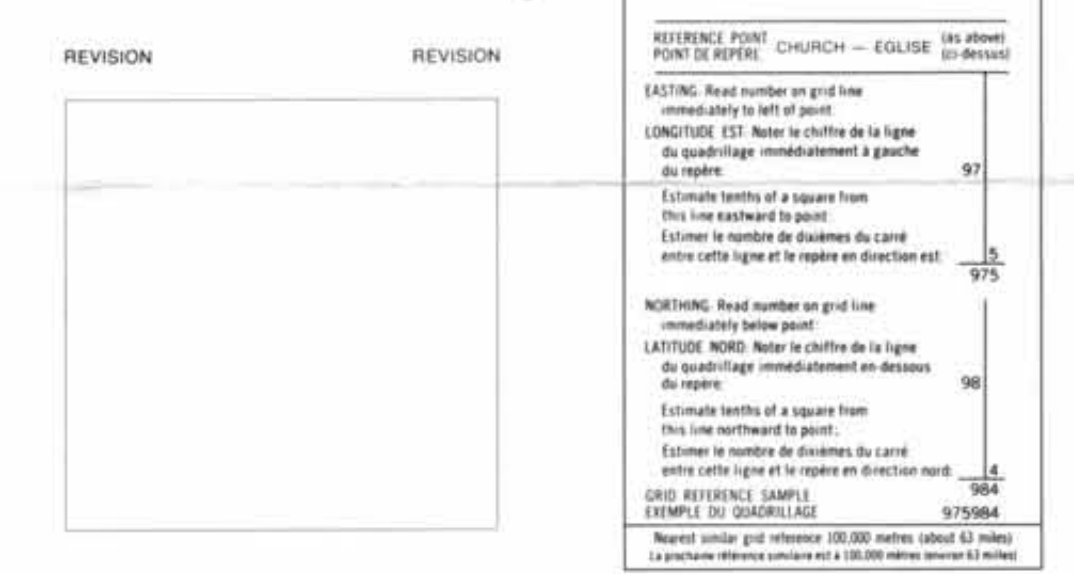
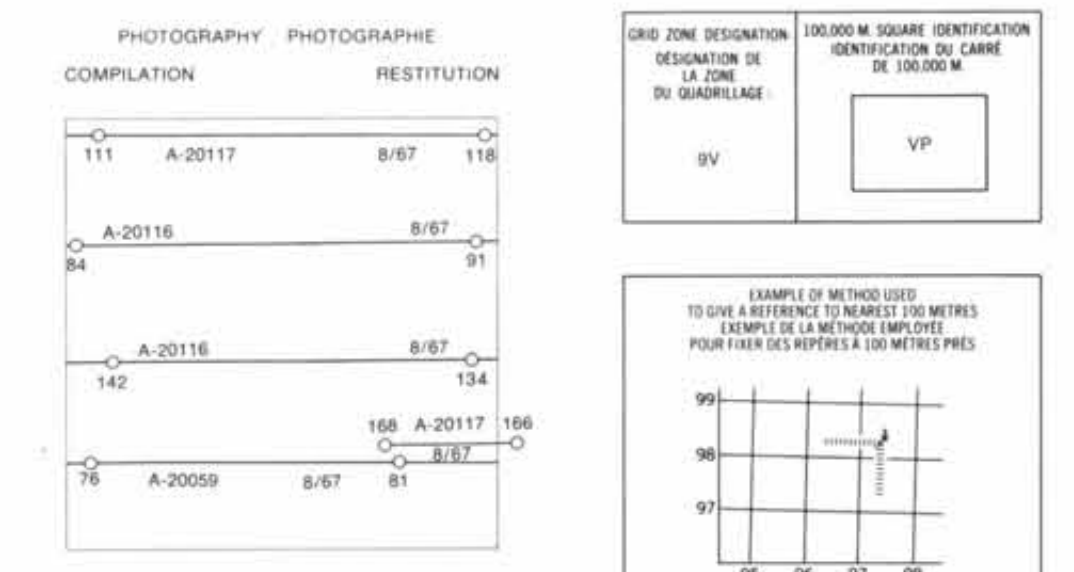
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LEGEND - LÉGENDE

ROADS AND RELATED FEATURES	ROUTES ET OUVRAGES CONNEXES
HARD SURFACE, ALL WEATHER	SURFACE PAVÉE, TOUTES SAISONS
LOOSE SURFACE	GRAVIER
CART TRACK, WINTER ROAD	CHEMIN DE TERRE, D'HIVER
TRAIL, CUT LINE, PORTAGE	SENTIER, PERÇÉE, PORTAGE
BUILT-UP AREA	AGGLOMÉRATION
RAILWAY, SIDING, STATION, STOP	CHEMIN DE FER, VOIE D'ÉVITEMENT, GARE, ARRÊT
BRIDGE	HYDROÉLECTRICITÉ, MOULINAGE
SEAPLANE BASE, ANCHORAGE	POINT DE RÉFÈRE
LANDMARK FEATURES	POINTS DE RÉFÈRE
HOUSE, BARN	MAISON, GRANGE
CHURCH, SCHOOL	ÉGLISE, ÉCOLE
POST OFFICE	BUREAU DE POSTE
HISTORICAL SITE	LIEU HISTORIQUE
TOWERS: FIRE, RADIO	TOURS: FEU, RADIO
WELL, OIL, GAS	Puits: PÉTROLE, GAZ
TANK: OIL, GASOLINE, WATER	RÉSERVOIR: PÉTROLE, ESSENCE, EAU
TELEPHONE LINE	LIGNE TÉLÉPHONIQUE
POWER TRANSMISSION LINE	LIGNE DE TRANSPORT D'ÉNERGIE
MINE	MINÉRIE
CUTTING, EMBANKMENT	DÉBLAI, REMBLAI
GRAVEL PIT	GRAVIER
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COUNTY, DISTRICT	COMTÉ, DISTRICT
TOWNSHIP, PARISH, SURVEYED, UNSURVEYED	CANTON, PAROISSE, APPENTÉE, NON APPENTÉE
TOWNSHIP, C.L.S. - SURVEYED, UNSURVEYED	TOWNSHIP, ATC-APPENTÉE, NON APPENTÉE
-CORNS DE SECTION	-CORNES DE SECTION
MUNICIPALITY	MUNICIPALITÉ
RESERVE, MOORING, PARK, ETC	RÉSERVE, MOORING, PARC, ETC
HORIZONTAL SURVEY POINT	RÉFÈRE PLANIMÉTRIQUE
BENCH MARK WITH ELEVATION	RÉFÈRE DE NIVELLEMENT AVEC COTE
SPOT ELEVATION, PRECISE, LAND, WATER	POINT COTE, PRECIS, SUR TERRE, SUR L'EAU
DRAINAGE AND RELATED FEATURES	DRAINAGE ET OUVRAGES CONNEXES
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DIRECTION OF FLOW	DIRECTION DU COURANT
LAKE, INTERMITTENT LAKE	LAC, INTERMITTENT
FLOODED LAND	TERRAIN INONDÉ
MARSH, SWAMP, WOODDED	MARAIS, MARÉCAGE (BOISÉ)
LIT DE COURS D'EAU TARI AVEC CHENAUX	
SAND: ABOVE, IN WATER	SABLE: AU DESSUS, DANS L'EAU
STRING BOGS	MARÉCAGE EN ENFILADE
TUNDRA: PONDS, POLYGONS	TOUNDRA: ETANGS, SOLS POLYGOONAUX
RAPIDS, CHUTES, RAPIDS	RAPIDES, CHUTES, RAPIDES
FORESHORE FLATS	ESTRANS
ROCK	ROCHER
DAM	BARRAGE
WHARF	QUAI
DITCH	FOSSE
RELIEF FEATURES	RELIEF
CONTOURS	COURBES DE NIVEAU
APPROXIMATE CONTOURS	COURBES DE NIVEAU APPROXIMATIVES
DEPRESSION CONTOUR	COURBE DE CUVETTE
SPOT ELEVATION, APPROXIMATE, LAND, WATER	POINT COTE, APPROXIMATIF, SUR TERRE, SUR L'EAU
ESKER	ESKER
PINGO	PINGO
SAND, SAND DUNES	SABLE, DUNES
PALKA BOG	PALKA
WOODLAND	RÉGION BOISÉE
CLEARED AREA	RÉGION DÉBOISÉE



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