MINERAL SHOWINGS LOCATION MAP

LEGEND:

LODE DEPOSITS

- ⊗ MINERAL PRODUCER (PAST, PRESENT OR FUTURE)
- ⊘ PROSPECT
- ● MINERAL OCCURRENCE (SMALL OR NO INFORMATION AVAILABLE)

COLOR CODE:

- ● GOLD
- ○ SILVER
- ● COPPER
- ● LEAD
- ● ZINC
- ● TUNGSTEN
- ● MOLYBDENUM
- ● IRON
- ● BARITE
- ● NICKEL
- ● ASBESTOS

PLACER DEPOSITS

- ○ GOLD
- ○ TIN

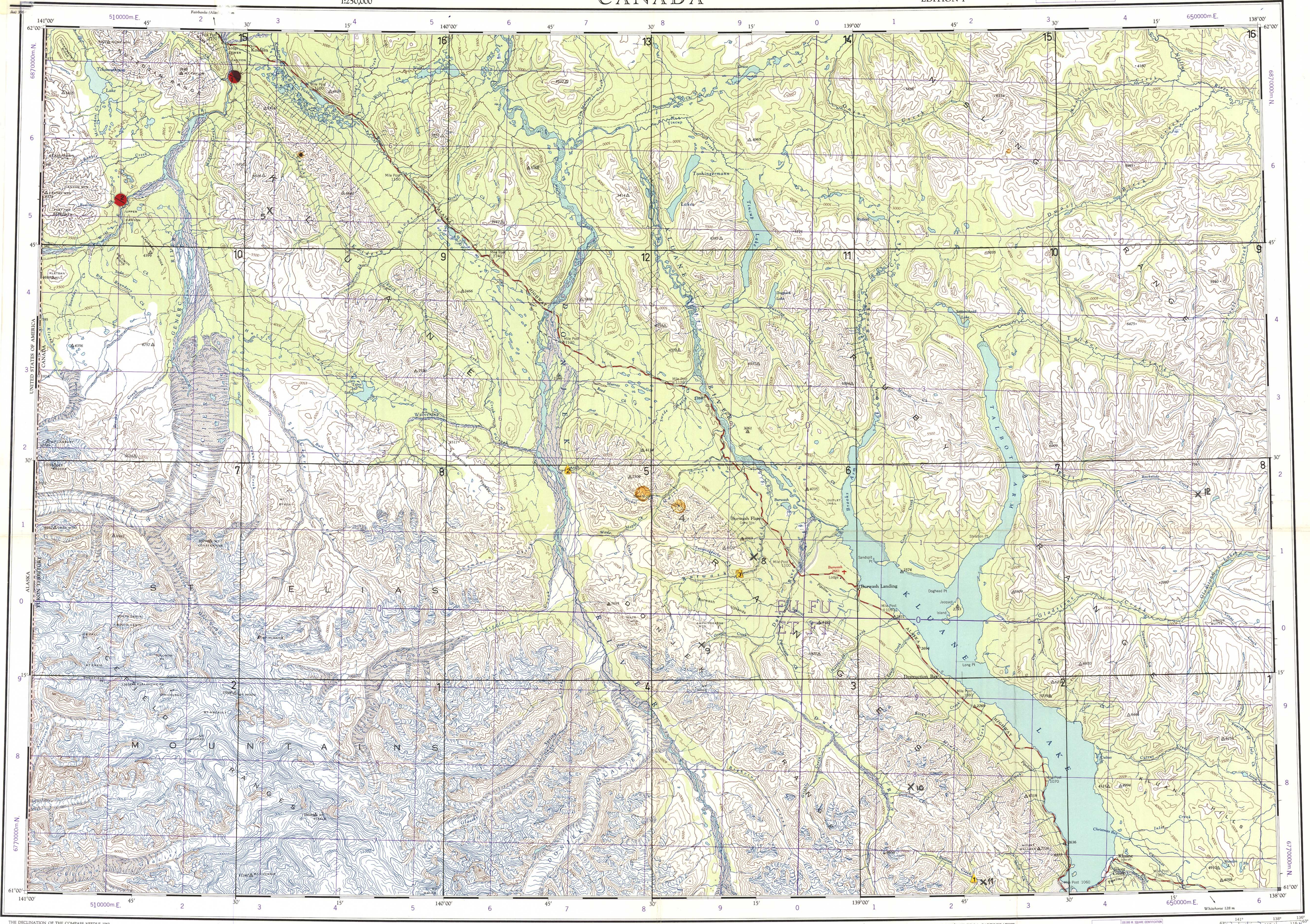
115G & 115F (E½) 1:250,000

CANADA

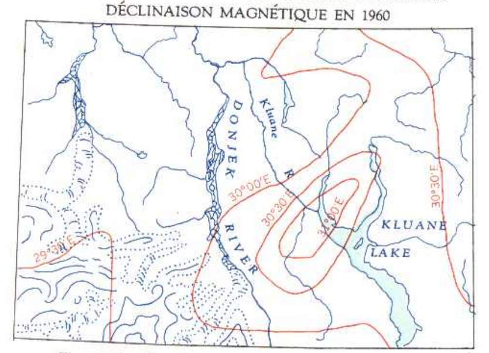
EDITION 1

Refer to this map as: 115 G & F (E½) EDITION 1 ASE SERIES A 502

115G & 115F (E½)



THE DECLINATION OF THE COMPASS NEEDLE 1960
DÉCLINAISON MAGNÉTIQUE EN 1960



The declination of the compass needle is decreasing 2.7 minutes annually.
La déclinaison magnétique décroit de 2.7 minutes annuellement

inches 0 1 2
centimetres 0 1 2 3 4 5

YUKON GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

Produced and Printed by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF MINES AND TECHNICAL SURVEYS, 1961 from air photographs taken from 1947 to 1951.

Road	Route			
hard surface, all weather ...	pavée, toute saison ...	more than 2 lanes plus de 2 voies	2 lanes 2 voies	less than 2 lanes moins de 2 voies
loose surface, all weather ...	de gravier, toute saison ...	2 lanes or more 2 voies ou plus	less than 2 lanes moins de 2 voies	dry weather période sèche

wagon, cart track ... chemin de terre ... trail or portage ... sentier ou portage
Railway, normal gauge ... Chemin de fer, écartement normal ... station gare, multiple track voies multiples, flagstop arrêt, single track voie unique, (abandoned) (abandonné)
Depression contours ..... Courbes de cuvette ... 2000
Spot elevation, in feet ... Repère de nivellement en pieds ... 2550
Power transmission line ... Ligne de transport d'énergie

KLUANE LAKE

YUKON TERRITORY

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Milles
Kilometres 5 0 5 10 15 20 25 30 Kilomètres

Transverse Mercator Projection
North American Datum 1927
Contour Interval 500 feet
Elevations in feet above Mean Sea Level

Projection Transverse de Mercator
Réseau géodésique nord-américain unifié 1927
Equidistance des courbes: 500 pieds
Elévations en pieds au-dessus du niveau moyen de la mer

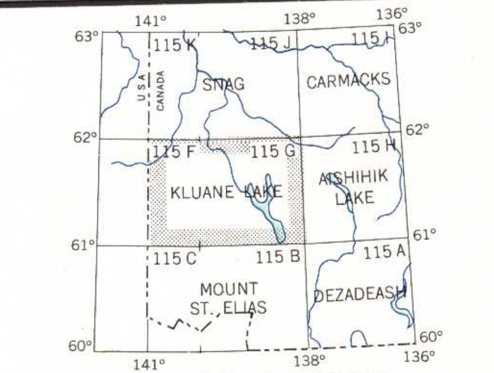
Établie et imprimée par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DES MINES ET DES RELEVÉS TECHNIQUES, en 1961, d'après les photographies aériennes prises de 1947 à 1951.

Town ...	Ville ...	Stream intermittent or dry ...	Cours d'eau intermittent ou à sec ...
Village or Settlement ...	Village ou hameau ...	Intermittent lake ...	Lac intermittent ...
Post office ...	Bureau de poste ... P	Rapids; falls ...	Rapides; chutes ... R F
Church ...	Église ...	Marsh or swamp ...	Marais ou marécage ...
School ...	École ...	Lighthouse ...	Phare ...
Boundary monument ...	Borne frontière ...	Airport ...	Aéroport ...
Horizontal control point ...	Point géodésique ... △	Debris covered ice ...	Glace couvert de débris ...

GRID ZONE DESIGNATION 7V
100,000 M. SQUARE IDENTIFICATION EU FU ET FT 680 50 60

TO GIVE A REFERENCE TO NEAREST 1000 METRES
EXAMPLE: MINE
SQUARE: Read letters of 100,000 m. square EU
EASTING: Read number on grid line immediately to left of point 7; Estimate tenths of a square from this line eastward to point 9; 79
NORTHING: Read number on grid line immediately below point 1; Estimate tenths of a square from this line northward to point 5; 15
MILITARY GRID REFERENCE (to nearest 1,000 metres) EU7915
If reporting beyond 18° in any direction, prefix Grid Zone Designation as: 7V EU7915

TEN THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 7



Index to adjoining sheets of National Topographic System
Tableau d'assemblage du Système de Référence Cartographique National

EDITION 1
KLUANE LAKE 115G & 115F (E½)

115 G & 115 F (E½)

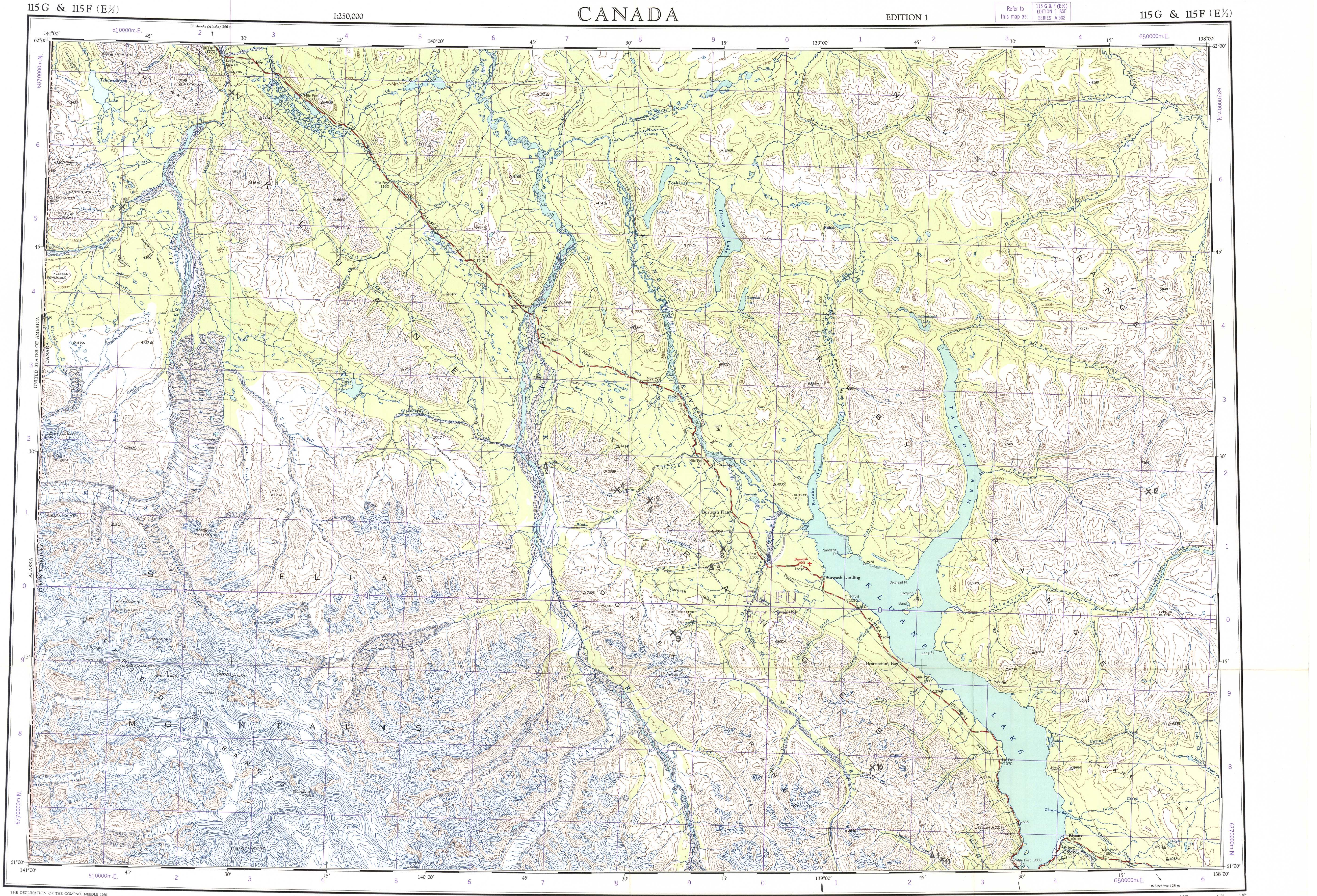
1:250,000

CANADA

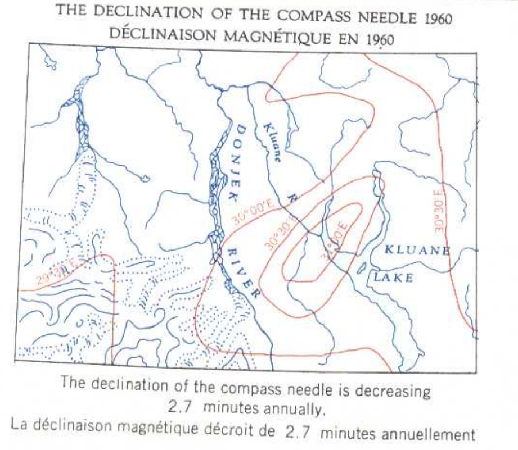
EDITION 1

Refer to this map as:	115 G & F (E½) EDITION 1 ASE SERIES A 502

115 G & 115 F (E½)



THE DECLINATION OF THE COMPASS NEEDLE 1960
DÉCLINAISON MAGNÉTIQUE EN 1960



The declination of the compass needle is decreasing 2.7 minutes annually.
La déclinaison magnétique décroit de 2.7 minutes annuellement

inches 0 1 2
centimetres 0 1 2 3 4 5

YUKON GEOLOGICAL SURVEY

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Railway, normal gauge ... Chemin de fer, écartement normal ... station gare; multiple track voies multiples; flagstop arrêt; single track voie unique; (abandoned) (abandonné)

Depression contours ..... Courbes de cuvette 2000

Spot elevation, in feet .... Repère de nivellement en pieds 2550

Power transmission line ... Ligne de transport d'énergie ....

KLUANE LAKE

YUKON TERRITORY

Scale 1:250,000 Échelle

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Kilometres 5 0 5 10 15 20 25 30 Kilomètres

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Contour Interval 500 feet
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Town	Ville	□
Village or Settlement	Village ou hameau	○
Post office	Bureau de poste	P
Church	Église	⛪
School	École	⛪
Boundary monument	Borne frontière	⊡
Horizontal control point	Point géodésique	△

Stream intermittent or dry	Cours d'eau intermittent ou à sec	
Intermittent lake	Lac intermittent	
Rapids; falls	Rapides; chutes	R F
Marsh or swamp	Marais ou marécage	
Lighthouse	Phare	✡
Airport	Aéroport	✚
Debris covered ice	Glace couvert de débris	

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7V	EU FU ET FT 680 50 60

TO GIVE A REFERENCE TO NEAREST 1000 METRES

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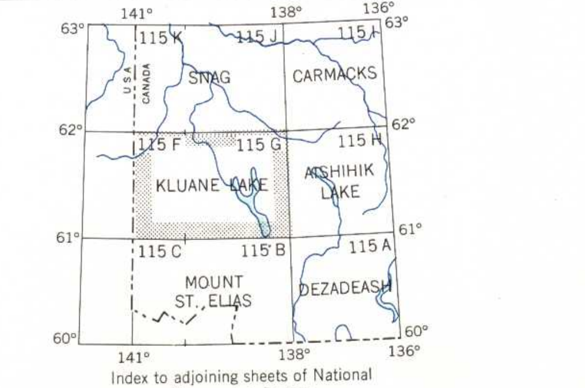


Index to adjoining sheets of National Topographic System

Tableau d'assemblage du Système de Référence Cartographique National

EDITION 1

KLUANE LAKE 115 G & 115 F (E½)

115 G & 115 F (E½) 1:250,000

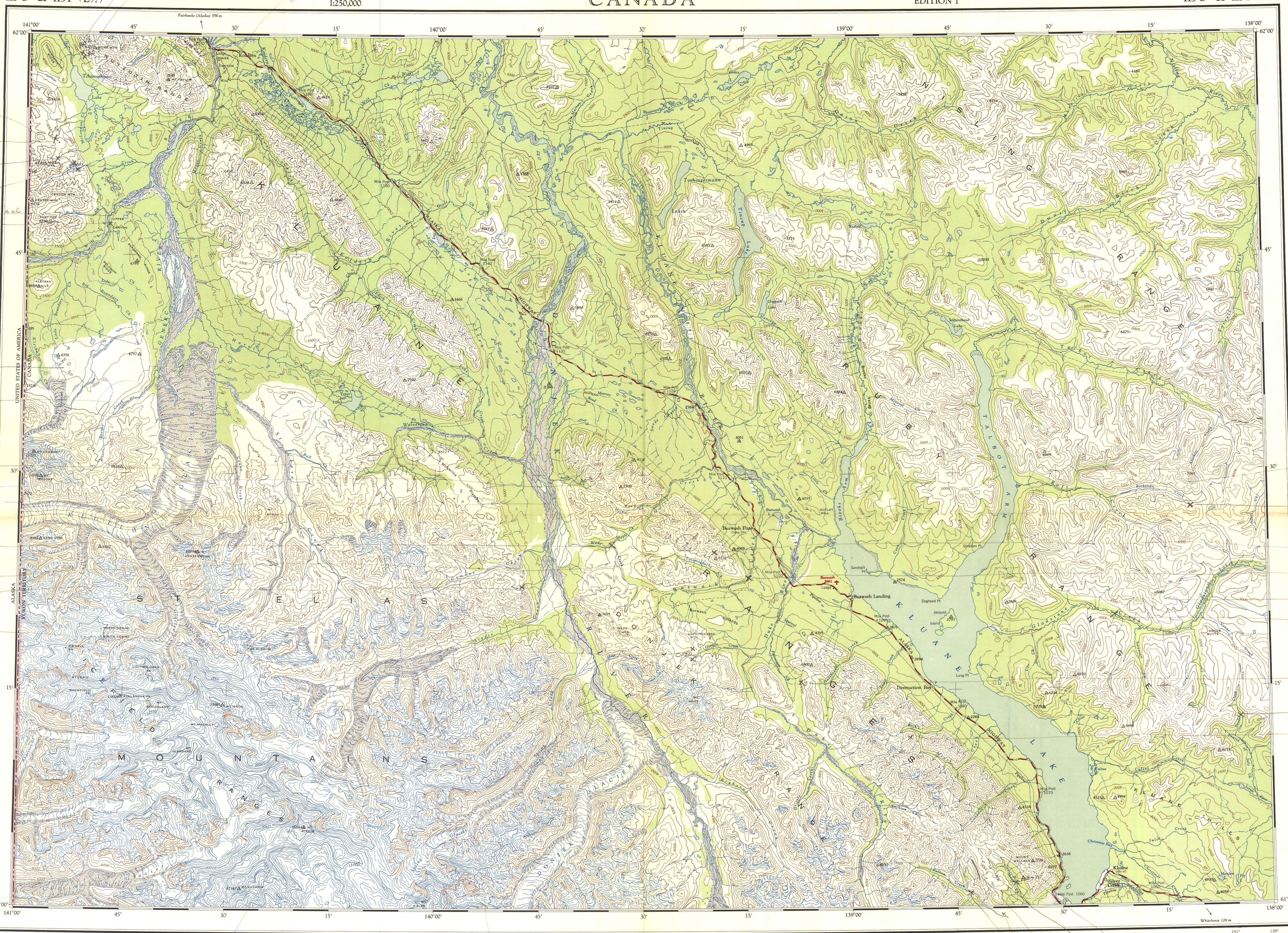
CANADA

EDITION 1 115 G & 115 F (E½)

See GSC map 19-1958

Bowen Ck
Hidden Ck

Ni Cu 15
Canalask Ni



Cu discovery crown leaks.

C-5
Ptarmigan Ck

C-4
McLennan Ck

Au-1
Rabbit Ck

Johannes staked 4 cl
Cu-6
Discovery Cu grant

Cu Area
Harry Johannes

Cu Area
mentioned by natives

Gossan
(Johannes)

Au-9 Arch Ck.

Wellgreen Mine

Gyp. 16
(Wade & Maple Ck)

Cu mineralization

C-22 Cement
& Steel creeks.

C-20 Granite
Cr.

(Hault's claims)?
(?)
Mo, Cu oxidized
hill with qtz vs

W, Fl,
Rockslide Ck.

Cu-13
Tatamagouche Cr.

Au-7
Burwash Ck.

Moly float
(Johannes)

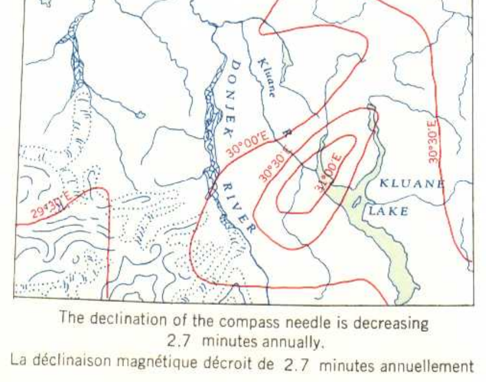
Au 8
Gladstone Ck.

C-21
Ptarmigan Ck.

Au 12 Snyder Ck

gyp 18
Bocks Ck.

THE DECLINATION OF THE COMPASS NEEDLE 1960
DÉCLINAISON MAGNÉTIQUE EN 1960



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inches 0 1 2
0 1 2 3 4 5 centimetres

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YUKON GEOLOGICAL SURVEY

Cu, Po, Asp
Ni or Al.

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Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa, at 25 cents each.

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Spot elevation, in feet ... Repère de nivellement en pieds				2550
Power transmission line ... Ligne de transport d'énergie				

FW Border zone
Pd?

KLUANE LAKE

YUKON TERRITORY

Tar Bay
Ag & Mining
Nazanta or Newmont
Frank Frederickson

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Milles
Kilometres 5 0 5 10 15 20 25 30 Kilomètres

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North American Datum 1927
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Ces cartes sont en vente au Bureau de distribution des cartes, ministère des Mines et des Relevés techniques, Ottawa. Prix de l'exemplaire: 25 cents.

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Boundary monument	Borne frontière .... ⊡	Airport	Aéroport	
Horizontal control point ..	Point géodésique .... △	Debris covered ice ..	Glace couvert de débris	

Au-11 Sheep Ck

Asb stringer
(Johannes)

C-19 Sheep Ck.

Au 10 Bullion Ck

Gyp 17 Bullion Ck.

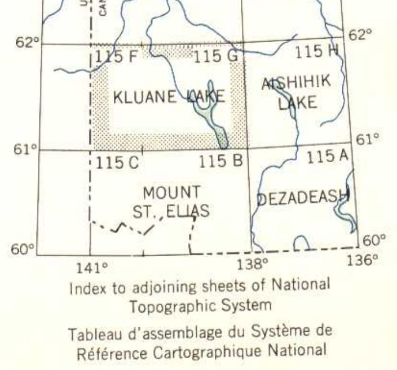

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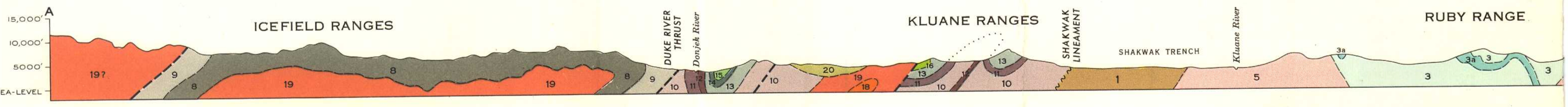
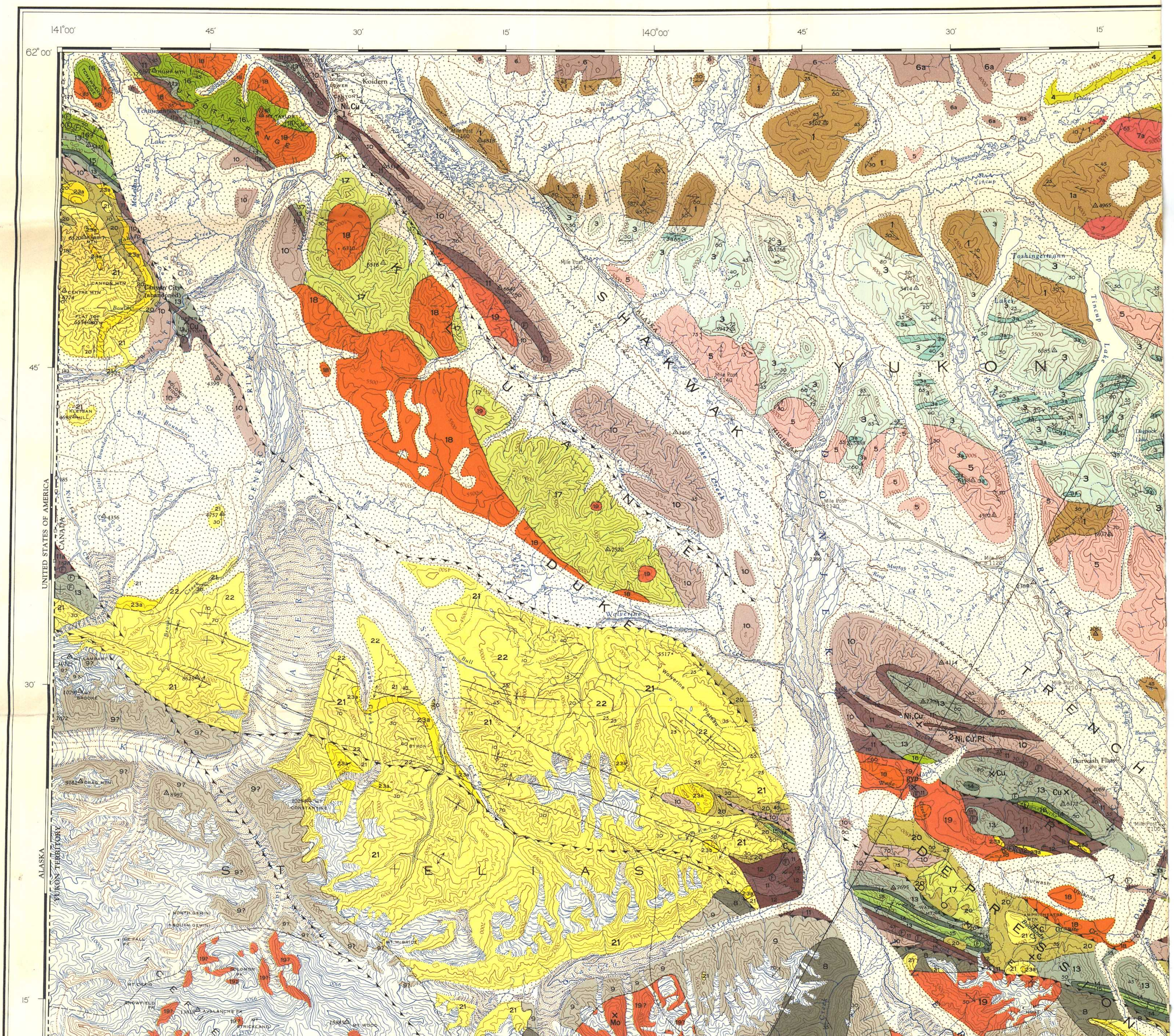
Tableau d'assemblage du Système de Référence Cartographique National

KLUANE LAKE 115 G & 115 F (E½)

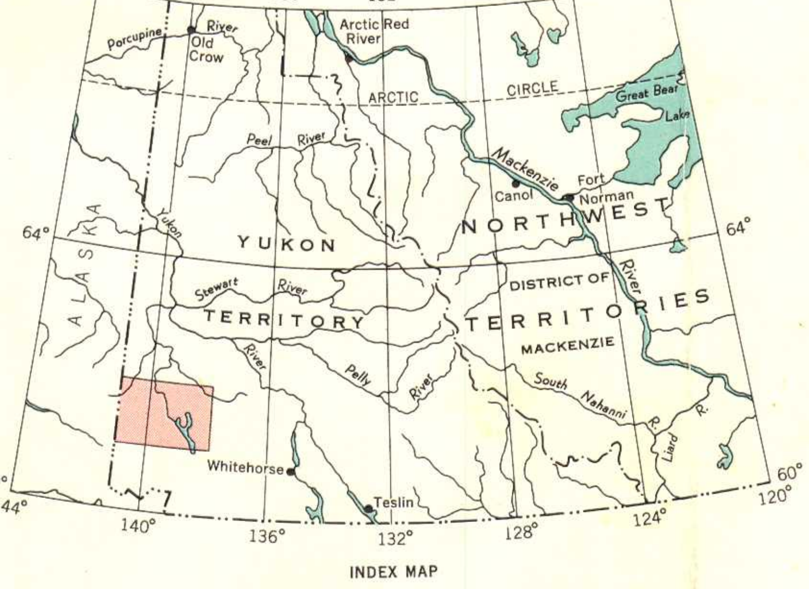
GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS



Sections along lines A-B, C-D



Published, 1966
Copies of this map may be obtained from the Director, Geological Survey of Canada, Ottawa



INDEX MAP

2.7
2.7
2.3
2.5-2.7
2.4

MAP 1177A

GEOLOGY

KLUANE LAKE

YUKON TERRITORY

Scale 1:253,440
(1 inch to 4 miles)

Miles 4 0 4 8 12 Miles
Kilometres 6 0 6 12 18 Kilometres

inches
0 1 2
0 1 2 3 4 5
centimetres

YUKON GEOLOGICAL SURVEY

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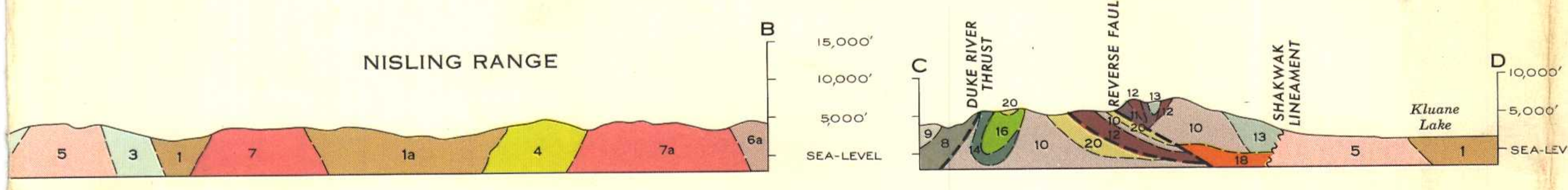
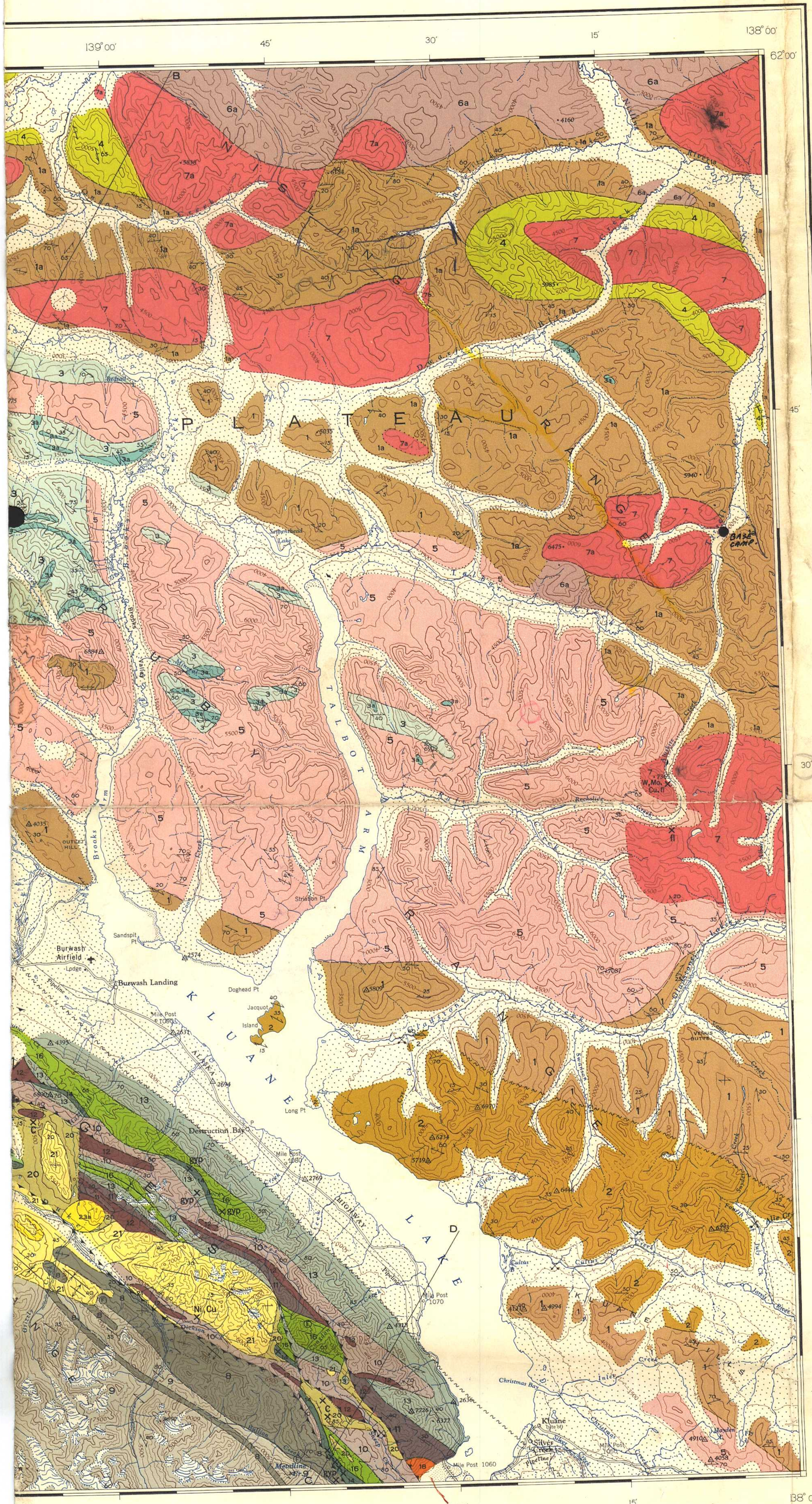


115 G, and 115 F E



Printed by the Surveys and Mapping Branch

LEGEND

FORMATIONS OF THE ST. ELIAS MOUNTAINS

CENOZOIC

TERTIARY
PALEOCENE AND LATER

23 **23a,** *porphyritic latite, trachyte, rhyolite;* **23b,** *gabbro*

ST. CLARE GROUP

21,22 **21,** *Red-brown basalt and andesite, massive or vesicular agglomerate, breccia, tuff* **22,** *Volcanic-boulder gravel and volcanic conglomerate, minor tuff, sandstone, shale, lava*

PALEOCENE OR EOCENE

20 *AMPHITHEATRE FORMATION: sandstone, sand, conglomerate, gravel, shale, coal*

CRETACEOUS AND (?) TERTIARY

19 *Icefield Ranges intrusions: alaskite, granite, granodiorite, porphyritic rhyolite; intimately mixed with 17*

MESOZOIC

CRETACEOUS AND (?) EARLIER

18 *Kluane Ranges intrusions: hornblende-biotite granodiorite, quartz diorite, diorite*

17 *Migmatized volcanic rock, hornfels, quartz-mica schist, augen gneiss, marble; minor granitic rock. May be in part Palaeozoic*

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
DEZADEASH GROUP

16 *Argillite, greywacke and conglomerate with graded bedding, thin limestone bands; banded hornfels near intrusions*

TRIASSIC
UPPER TRIASSIC
MUSH LAKE GROUP

15 *Thin bedded shaly limestone, calcareous and silty shale*

14 *Limestone, commonly brecciated; gypsum*

13 *Basalt and andesite, mainly amygdaloidal, purple and green; minor interbedded shale, argillite, greywacke, silty limestone, chert, conglomerate. May be in part pre-Upper Triassic.*

PERMIAN AND/OR TRIASSIC

12 *Peridotite, gabbro; minor banded chert*

PALAEOZOIC

PERMIAN AND (?) EARLIER
LOWER PERMIAN AND (?) EARLIER
CACHE CREEK GROUP

11 *Argillite, sandstone, grit, conglomerate, limestone, chert;* **11a,** *limestone*

10 *Propylitic basic lava, banded cherty tuff, volcanic breccia, chlorite schist; minor greywacke, argillite, limestone. May include some 9 and 13*

DEVONIAN AND/OR MISSISSIPPIAN

9 *Greenstone, schistose greywacke, quartzite, slate, phyllite; minor sheared conglomerate, marble. May include some of 16*

DEVONIAN
MIDDLE AND UPPER DEVONIAN
KASKAWULSH GROUP

8 *Marble, argillite; minor phyllite, greenstone*

FORMATIONS OF YUKON PLATEAU

MESOZOIC AND (?) CENOZOIC

MESOZOIC AND (?) EARLY TERTIARY

7 *Nisling Range alaskite' (includes Rockslide Creek Stock): alaskite, granite, quartz monzonite; minor rhyolite;* **7a,** *rhyolite, fine-grained granite*

6 *'Nisling Range granodiorite': biotite-hornblende granodiorite; granogabbro, quartz monzonite;* **6a,** *includes many rhyolite dykes*

5 *Ruby Range batholith (includes granitic rocks in southeast corner): biotite-hornblende granodiorite, quartz monzonite, quartz diorite; minor granodiorite-gneiss*

TRIASSIC AND (?) LATER

4 *Porphyritic basalt, andesite, latite, rhyolite; related tuff and breccia*

PRE-MESOZOIC (MAINLY)

YUKON COMPLEX

3 **3b** **3a** *Quartz-chlorite-sericite schist, epidote-actinolite greenschist, quartzite, slate, quartz-mica schist, limestone;* **3a,** *recrystallized limestone;* **3b,** *dunite*

2 *Quartz-sericite-chlorite schist; minor quartzite*

1 *Quartz-biotite schist, in places carrying garnet; quartz-feldspar-biotite gneiss, amphibolite; minor recrystallized limestone;* **1a,** *contains many rhyolite dykes and sills*

Drift-covered area . . . . ⁘
Bedding (horizontal, inclined, vertical) . . . . + ⁄ ╳
Schistosity, gneissosity (horizontal, inclined, vertical) . . . . . . + ⁄ ╳
Fault (assumed) . . . . ~~~~~~
Thrust fault (teeth in direction of dip; assumed) . . . . . . ▲▲▲▲
Anticline (normal, overturned) . . . . ↕ ⋂
Syncline . . . . ┼
Fossil locality . . . . Ⓕ
Former placer operation (gold) . . . . ✕
Mineral occurrence . . . . ×
*Mining property adit (***1**, *Canalask Nickel Mines;*
2, *Hudson Bay Mining and Smelting Co.)* . . . . ≻

MINERAL OCCURRENCES

Coal	**C**	*Molybdenum*	**Mo**
Copper	**Cu**	*Nickel*	**Ni**
Fluorite	**fl**	*Platinum*	**Pt**
Gypsum	**gyp**	*Tungsten*	**W**

Geology by J. E. Muller, 1950-53, 1956-57;
R. L. Christie, 1953

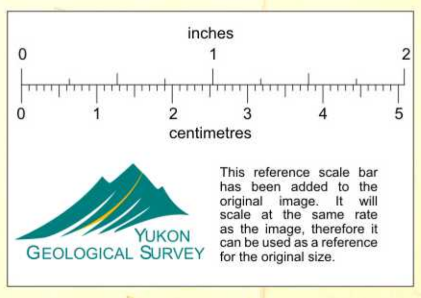
To accompany GSC Memoir 340 by J. E. Muller

Geological cartography by the Geological Survey of Canada, 1965

Mean magnetic declination, 29°42' E, decreasing 3.5' annually. Readings vary from 28°50' E in the SW corner to 30°42' E in the NE corner of the map-area

LEGEND

Road, all weather . . . . ═══
Road, dry weather . . . . ═ ═ ═
Cart track . . . . – – – –
Trail or portage . . . . - - - - -
International boundary . . . . — - - —
Boundary monument . . . . ⊡
Horizontal control point . . . . △
Post Office . . . . P
Glacier . . . .
Intermittent stream . . . .
Marsh . . . .
Dry river bed . . . .
Sand or mud . . . .
Debris-covered ice . . . .
Contours (interval 500 feet) 3500
Height in feet above mean sea-level . . . . 7150.



YUKON GEOLOGICAL SURVEY

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Base-map compiled and drawn by the Surveys and Mapping Branch, 1961

115 G & 115 F (E½) 1:250,000

CANADA

EDITION 1

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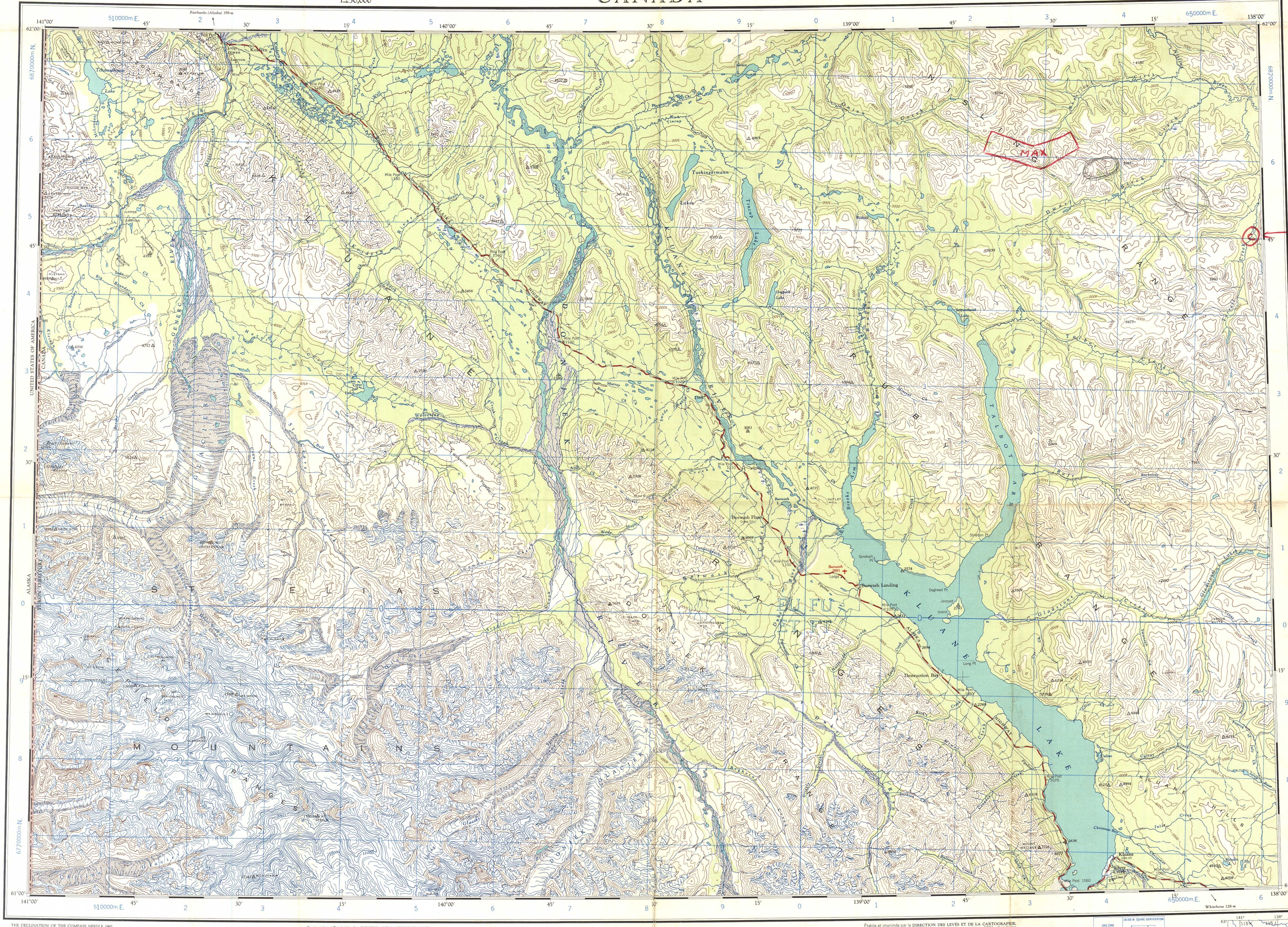
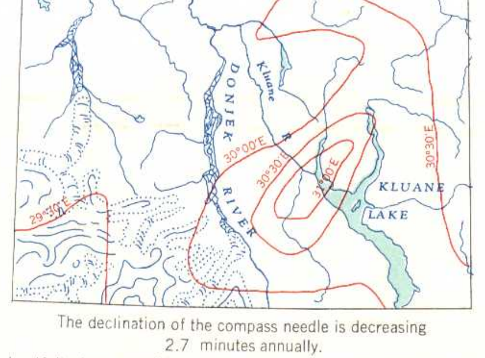
115 G & 115 F (E½)



PROPOSED
VICT OEX
CAMP
JULY 1
G. PEARSE

THE DECLINATION OF THE COMPASS NEEDLE 1960
DÉCLINAISON MAGNÉTIQUE EN 1960



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inches 0 1 2
0 1 2 3 4 5
centimetres

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Road	Route			
hard surface, all weather ...	pavée, toute saison	more than 2 lanes plus de 2 voies	2 lanes 2 voies	less than 2 lanes moins de 2 voies
loose surface, all weather ...	de gravier, toute saison	2 lanes or more 2 voies ou plus	less than 2 lanes moins de 2 voies	dry weather période sèche
wagon, cart track ... chemin de terre	trail or portage ... sentier ou portage			
Railway, normal gauge ...	Chemin de fer, écartement normal	station gare	multiple track voies multiples	flagstop arrêt
		single track voie unique	(abandoned) (abandonné)	
Depression contours	Courbes de cuvette	2000		
Spot elevation, in feet	Repère de nivellement en pieds	2550		
Power transmission line	Ligne de transport d'énergie			

KLUANE LAKE

YUKON TERRITORY

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Milles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

Transverse Mercator Projection
North American Datum 1927
Contour Interval 500 feet
Elevations in feet above Mean Sea Level

Projection Transverse de Mercator
Réseau géodésique nord-américain unifié 1927
Équidistance des courbes: 500 pieds
Élévations en pieds au-dessus du niveau moyen de la mer

Établie et imprimée par la **DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DES MINES ET DES RELEVÉS TECHNIQUES**, en 1961, d'après les photographies aériennes prises de 1947 à 1951.

Ces cartes sont en vente au Bureau de distribution des cartes, ministère des Mines et des Relevés techniques, Ottawa.

Town	Ville	□
Village or Settlement	Village ou hameau	○
Post office	Bureau de poste	P
Church	Église	
School	École	
Boundary monument	Borne frontière	⊡
Horizontal control point	Point géodésique	△

Stream intermittent or dry	Cours d'eau intermittent ou à sec	
Intermittent lake	Lac Intermittent	
Rapids; falls	Rapides; chutes	R F
Marsh or swamp	Marais ou marécage	
Lighthouse	Phare	✡
Airport	Aéroport	
Debris covered ice	Glace couvert de débris	

GRID ZONE DESIGNATION	100,000 M. SQUARE IDENTIFICATION
7V	EU FU ET FT 50 60 680

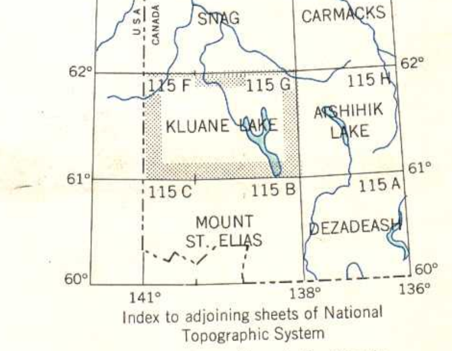
TO GIVE A REFERENCE TO NEAREST 1000 METRES

EXAMPLE: MINE

SQUARE: Read letters of 100,000 m. square	EU
EASTING: Read number on grid line immediately to left of point Estimate tenths of a square from this line eastward to point.	7 9 79
NORTHING: Read number on grid line immediately below point Estimate tenths of a square from this line northward to point.	1 5 15
MILITARY GRID REFERENCE (to nearest 1,000 metres)	EU7915

If reporting beyond 18° in any direction, prefix Grid Zone Designation as: 7V EU7915

TEN THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 7



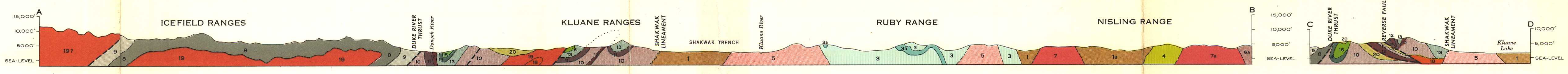
Index to adjoining sheets of National Topographic System

Tableau d'assemblage du Système de Référence Cartographique National

EDITION 1

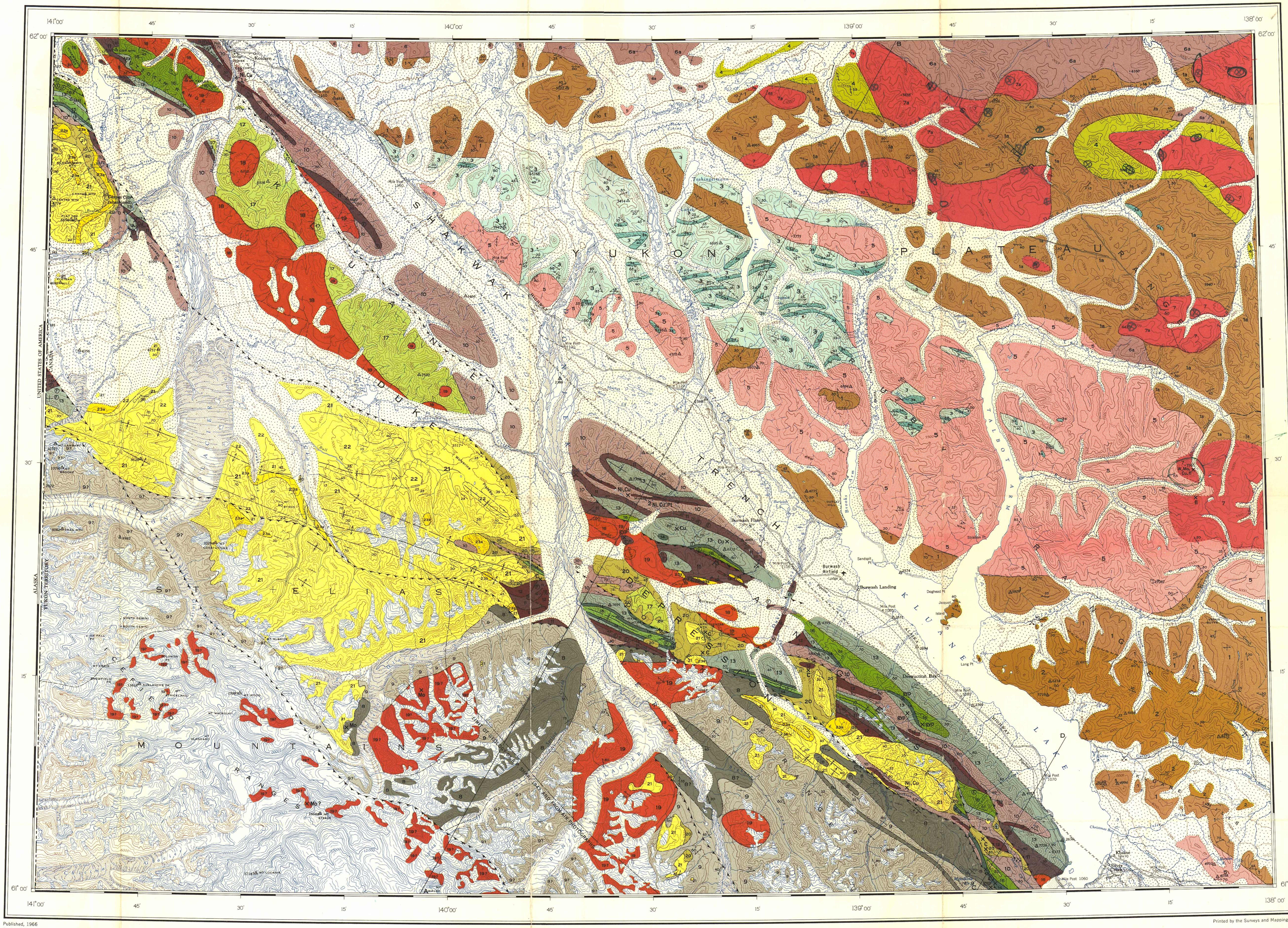
KLUANE LAKE 115 G & 115 F (E½)

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS



Sections along lines A-B, C-D

115 G, and 115F E



O mag.

W, Mo, Cu, Fl.

LEGEND

FORMATIONS OF THE ST. ELIAS MOUNTAINS

CENOZOIC

TERTIARY
PALEOCENE AND LATER

23 23a, *porphyritic latite, trachyte, rhyolite;* 23b, *gabbro*

ST. CLARE GROUP

21,22 21, *Red-brown basalt and andesite, massive or vesicular agglomerate, breccia, tuff*
22, *Volcanic-boulder gravel and volcanic conglomerate, minor tuff, sandstone, shale, lava*

PALEOCENE OR EOCENE

20 *AMPHITHEATRE FORMATION: sandstone, sand, conglomerate, gravel, shale, coal*

CRETACEOUS AND(?) TERTIARY

19 *Icefield Ranges intrusions: alaskite, granite, granodiorite, porphyritic rhyolite; intimately mixed with 17*

MESOZOIC

CRETACEOUS AND(?) EARLIER

18 *Kluane Ranges intrusions: hornblende-biotite granodiorite, quartz diorite, diorite*

17 *Migmatized volcanic rock, hornfels, quartz-mica schist, augen gneiss, marble; minor granitic rock. May be in part Palaeozoic*

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
DEZADEASH GROUP

16 *Argillite, greywacke and conglomerate with graded bedding, thin limestone bands; banded hornfels near intrusions*

TRIASSIC
UPPER TRIASSIC
MUSH LAKE GROUP

15 *Thin bedded shaly limestone, calcareous and silty shale*

14 *Limestone, commonly brecciated; gypsum*

13 *Basalt and andesite, mainly amygdaloidal, purple and green; minor interbedded shale, argillite, greywacke, silty limestone, chert, conglomerate. May be in part pre-Upper Triassic.*

PERMIAN AND/OR TRIASSIC

12 *Peridotite, gabbro; minor banded chert*

PALAEOZOIC

PERMIAN AND (?) EARLIER
LOWER PERMIAN AND(?) EARLIER
CACHE CREEK GROUP

11 *Argillite, sandstone, grit, conglomerate, limestone, chert;* 11a, *limestone*

10 *Propylitic basic lava, banded cherty tuff, volcanic breccia, chlorite schist; minor greywacke, argillite, limestone. May include some 9 and 13*

DEVONIAN AND/OR MISSISSIPPIAN

9 *Greenstone, schistose greywacke, quartzite, slate, phyllite; minor sheared conglomerate, marble. May include some of 16*

DEVONIAN
MIDDLE AND UPPER DEVONIAN
KASKAWULSH GROUP

8 *Marble, argillite; minor phyllite, greenstone*

FORMATIONS OF YUKON PLATEAU

MESOZOIC AND(?) CENOZOIC

MESOZOIC AND (?) EARLY TERTIARY

7 *Nisling Range alaskite' (includes Rockslide Creek Stock): alaskite, granite, quartz monzonite; minor rhyolite;* 7a, *rhyolite, fine-grained granite*

6 *'Nisling Range granodiorite': biotite-hornblende granodiorite; granogabbro, quartz monzonite;* 6a, *includes many rhyolite dykes*

5 *Ruby Range batholith (includes granitic rocks in southeast corner): biotite-hornblende granodiorite, quartz monzonite, quartz diorite; minor granodiorite-gneiss*

TRIASSIC AND (?) LATER

4 *Porphyritic basalt, andesite, latite, rhyolite; related tuff and breccia*

PRE-MESOZOIC (MAINLY)

YUKON COMPLEX

3 | 3b | 3a *Quartz-chlorite-sericite schist, epidote-actinolite greenschist, quartzite, slate, quartz-mica schist, limestone;* 3a, *recrystallized limestone;* 3b, *dunite*

2 *Quartz-sericite-chlorite schist; minor quartzite*

1 *Quartz-biotite schist, in places carrying garnet; quartz-feldspar-biotite gneiss, amphibolite; minor recrystallized limestone;* 1a, *contains many rhyolite dykes and sills*

Drift-covered area . . . . ⁘
Bedding (horizontal, inclined, vertical) . . . . + ⁄ ⁄
Schistosity, gneissosity (horizontal, inclined, vertical) . . . . + ⁄ ⁄
Fault (assumed) . . . . ~~~~~~
Thrust fault (teeth in direction of dip; assumed) . . . . ▲▲▲▲
Anticline (normal, overturned) . . . . ↕
Syncline . . . .
Fossil locality . . . . Ⓕ
Former placer operation (gold) . . . . ✕
Mineral occurrence . . . . ✕
Mining property adit (1, Canalask Nickel Mines; 2, Hudson Bay Mining and Smelting Co.) . . . . ≻

MINERAL OCCURRENCES

Coal	C	*Molybdenum*	Mo
Copper	Cu	*Nickel*	Ni
Fluorite	fl	*Platinum*	Pt
Gypsum	gyp	*Tungsten*	W

Geology by J. E. Muller, 1950-53, 1956-57;
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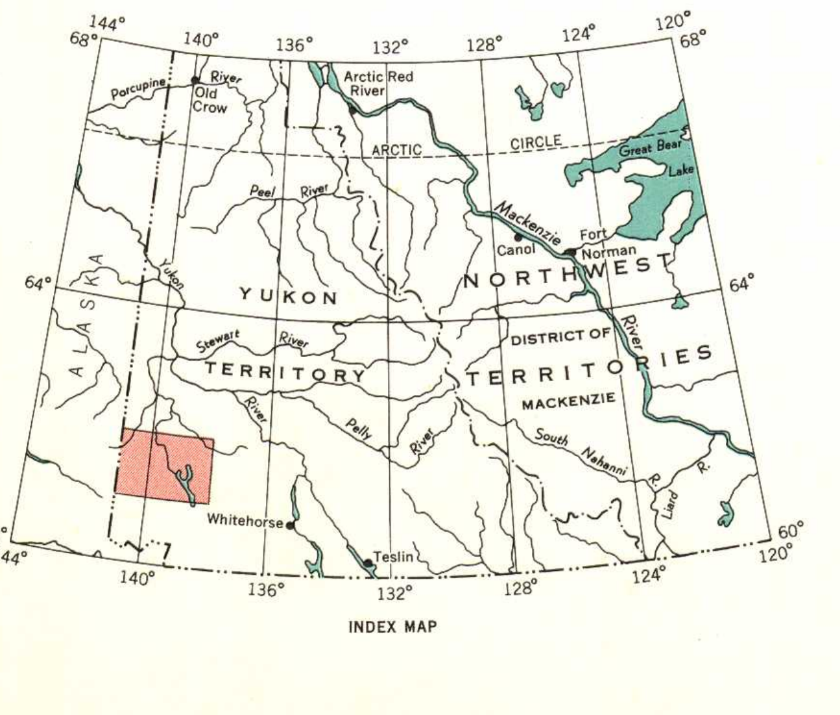


INDEX MAP

MAP 1177A

GEOLOGY

KLUANE LAKE

YUKON TERRITORY

Scale 1:253,440
(1 inch to 4 miles)

Miles 4 0 4 8 12 Miles

Kilometres 6 0 6 12 18 Kilometres

inches 0 1 2

0 1 2 3 4 5 centimetres

YUKON GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

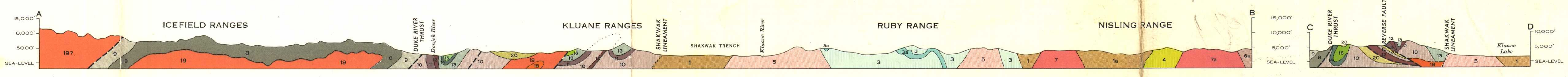
Printed by the Surveys and Mapping Branch

LEGEND

Road, all weather . . . . ═
Road, dry weather . . . . ═ ═ ═
Cart track . . . . – – –
Trail or portage . . . . - - - -
International boundary . . . . — - - —
Boundary monument . . . . ⊡
Horizontal control point . . . . △
Post Office . . . . P
Glacier . . . .
Intermittent stream . . . .
Marsh . . . .
Dry river bed . . . .
Sand or mud . . . .
Debris-covered ice . . . .
Contours (interval 500 feet) 3500
Height in feet above mean sea-level . . . . 7150.

Base-map compiled and drawn by the Surveys and Mapping Branch, 1961

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS



Sections along lines A-B, C-D

115G, and 115F E

LEGEND

FORMATIONS OF THE ST. ELIAS MOUNTAINS

CENOZOIC

TERTIARY
PALEOCENE AND LATER

23 — **23a**, *porphyritic latite, trachyte, rhyolite;* **23b**, *gabbro*

ST. CLARE GROUP

21,22 — **21**, *Red-brown basalt and andesite, massive or vesicular agglomerate, breccia, tuff*
22, *Volcanic-boulder gravel and volcanic conglomerate, minor tuff, sandstone, shale, lava*

PALEOCENE OR EOCENE

20 — *AMPHITHEATRE FORMATION: sandstone, sand, conglomerate, gravel, shale, coal*

CRETACEOUS AND(?) TERTIARY

19 — *Icefield Ranges intrusions: alaskite, granite, granodiorite, porphyritic rhyolite; intimately mixed with 17*

CRETACEOUS AND(?) EARLIER

18 — *Kluane Ranges intrusions: hornblende-biotite granodiorite, quartz diorite, diorite*

17 — *Migmatized volcanic rock, hornfels, quartz-mica schist, augen gneiss, marble; minor granitic rock. May be in part Palaeozoic*

MESOZOIC

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
DEZADEASH GROUP

16 — *Argillite, greywacke and conglomerate with graded bedding, thin limestone bands; banded hornfels near intrusions*

TRIASSIC
UPPER TRIASSIC
MUSH LAKE GROUP

15 — *Thin bedded shaly limestone, calcareous and silty shale*

14 — *Limestone, commonly brecciated; gypsum*

13 — *Basalt and andesite, mainly amygdaloidal, purple and green; minor interbedded shale, argillite, greywacke, silty limestone, chert, conglomerate. May be in part pre-Upper Triassic.*

PERMIAN AND/OR TRIASSIC

12 — *Peridotite, gabbro; minor banded chert*

PALAEOZOIC

PERMIAN AND (?) EARLIER
LOWER PERMIAN AND (?) EARLIER
CACHE CREEK GROUP

11 — *Argillite, sandstone, grit, conglomerate, limestone, chert;* **11a**, *limestone*

10 — *Propylitic basic lava, banded cherty tuff, volcanic breccia, chlorite schist; minor greywacke, argillite, limestone. May include some 9 and 13*

DEVONIAN AND/OR MISSISSIPPIAN

9 — *Greenstone, schistose greywacke, quartzite, slate, phyllite; minor sheared conglomerate, marble. May include some of 16*

DEVONIAN
MIDDLE AND UPPER DEVONIAN
KASKAWULSH GROUP

8 — *Marble, argillite; minor phyllite, greenstone*

FORMATIONS OF YUKON PLATEAU

MESOZOIC AND(?) CENOZOIC

MESOZOIC AND (?) EARLY TERTIARY

7 — *Nisling Range alaskite' (includes Rockslide Creek Stock): alaskite, granite, quartz monzonite; minor rhyolite;* **7a**, *rhyolite, fine-grained granite*

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TRIASSIC AND (?) LATER

4 — *Porphyritic basalt, andesite, latite, rhyolite; related tuff and breccia*

PRE-MESOZOIC (MAINLY)

YUKON COMPLEX

3 | 3b | 3a — *Quartz-chlorite-sericite schist, epidote-actinolite greenschist, quartzite, slate, quartz-mica schist, limestone;* **3a**, *recrystallized limestone;* **3b**, *dunite*

2 — *Quartz-sericite-chlorite schist; minor quartzite*

1 — *Quartz-biotite schist, in places carrying garnet; quartz-feldspar-biotite gneiss, amphibolite; minor recrystallized limestone;* **1a**, *contains many rhyolite dykes and sills*

Kluane Lake 115-G

Drift-covered area ....
Bedding (horizontal, inclined, vertical) ....
Schistosity, gneissosity (horizontal, inclined, vertical) ....
Fault (assumed) .... ~~~~~~
Thrust fault (teeth in direction of dip; assumed) .... ▲▲▲▲
Anticline (normal, overturned) ....
Syncline ....
Fossil locality .... Ⓕ
Former placer operation (gold) .... ✕
Mineral occurrence .... ✕
*Mining property adit (***1***, Canalask Nickel Mines;*
2, *Hudson Bay Mining and Smelting Co.)* .... ≻

MINERAL OCCURRENCES

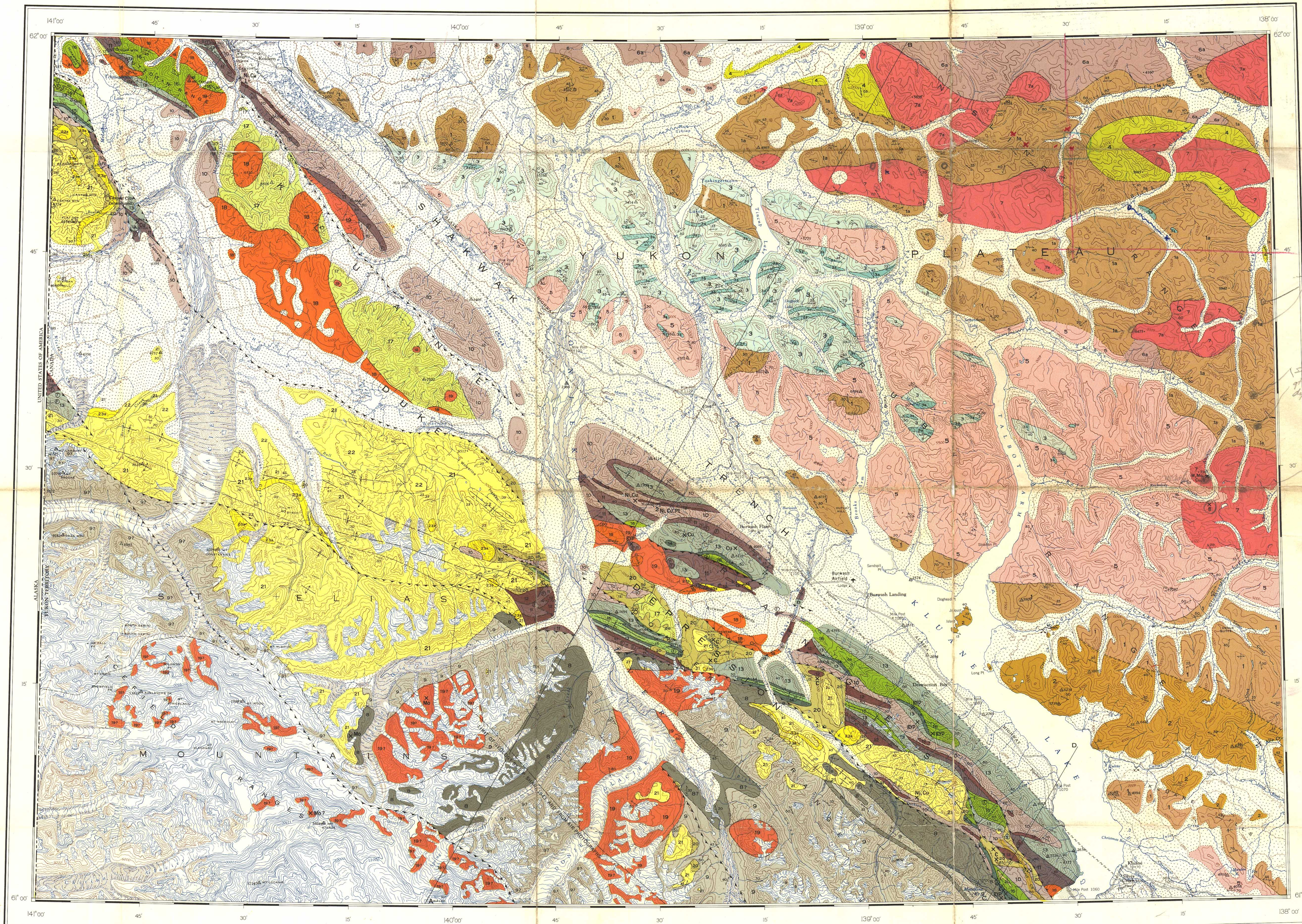
Coal	C	*Molybdenum*	Mo
Copper	Cu	*Nickel*	Ni
Fluorite	fl	*Platinum*	Pt
Gypsum	gyp	*Tungsten*	W

Geology by J. E. Muller, 1950-53, 1956-57;
R. L. Christie, 1953

To accompany GSC Memoir 340 by J. E. Muller

Geological cartography by the Geological Survey of Canada, 1965

Mean magnetic declination, 29°42' E, decreasing 3.5' annually. Readings vary from 28°50' E in the SW corner to 30°42' E in the NE corner of the map-area



gossan

Soil
qtz feld ϕ
dykes cutting
1a qtzite

Published, 1966
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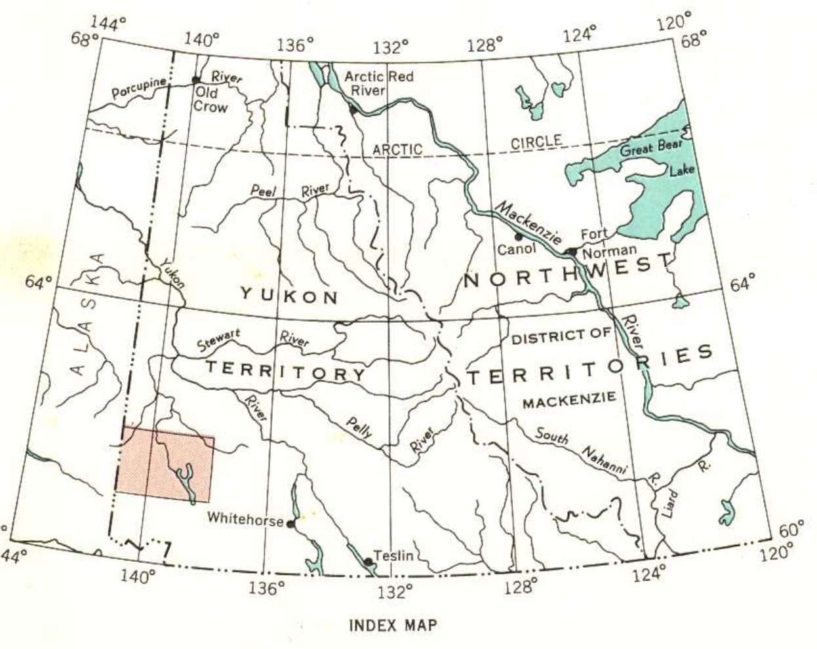


INDEX MAP

MAP 1177A

GEOLOGY

KLUANE LAKE

YUKON TERRITORY

Scale 1:253,440
(1 inch to 4 miles)

Miles 4 0 4 8 12 Miles
Kilometres 6 0 6 12 18 Kilometres

inches 0 1 2
0 1 2 3 4 5 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

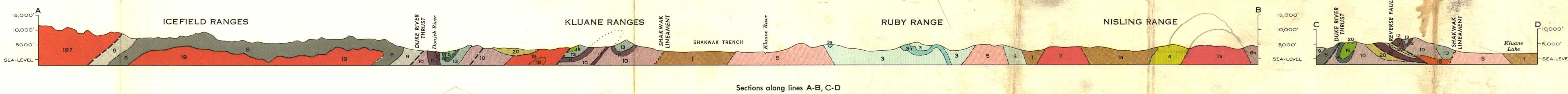
LEGEND

Road, all weather ....
Road, dry weather ....
Cart track ....
Trail or portage ....
International boundary ....
Boundary monument .... ⊡
Horizontal control point .... △
Post Office .... P
Glacier ....
Intermittent stream ....
Marsh ....
Dry river bed ....
Sand or mud ....
Debris-covered ice ....
Contours (interval 500 feet) 3500
Height in feet above mean sea-level .... 7150.

Base-map compiled and drawn by the Surveys and Mapping Branch, 1961

115-G

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS



Sections along lines A-B, C-D

115G, and 115F E

LEGEND

FORMATIONS OF THE ST. ELIAS MOUNTAINS

CENOZOIC

TERTIARY
PALEOCENE AND LATER

- **23** *23a, porphyritic latite, trachyte, rhyolite; 23b, gabbro*

ST. CLARE GROUP

- **21,22** *21, Red-brown basalt and andesite, massive or vesicular agglomerate, breccia, tuff*
  22, Volcanic-boulder gravel and volcanic conglomerate, minor tuff, sandstone, shale, lava

PALEOCENE OR EOCENE

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MESOZOIC

CRETACEOUS AND(?) TERTIARY

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CRETACEOUS AND(?) EARLIER

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JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
DEZADEASH GROUP

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UPPER TRIASSIC
MUSH LAKE GROUP

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PALAEOZOIC

PERMIAN AND (?) EARLIER
LOWER PERMIAN AND (?) EARLIER
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MIDDLE AND UPPER DEVONIAN
KASKAWULSH GROUP

- **8** *Marble, argillite; minor phyllite, greenstone*

FORMATIONS OF YUKON PLATEAU

MESOZOIC AND(?) CENOZOIC

MESOZOIC AND (?) EARLY TERTIARY

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TRIASSIC AND (?) LATER

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PRE-MESOZOIC (MAINLY)

YUKON COMPLEX

- **3 | 3b | 3a** *Quartz-chlorite-sericite schist, epidote-actinolite greenschist, quartzite, slate, quartz-mica schist, limestone; 3a, recrystallized limestone; 3b, dunite*
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- **1** *Quartz-biotite schist, in places carrying garnet; quartz-feldspar-biotite gneiss, amphibolite; minor recrystallized limestone; 1a, contains many rhyolite dykes and sills*

Drift-covered area . . . . ⁚⁚⁚
Bedding (horizontal, inclined, vertical) . . . . + ⁄ ✕
Schistosity, gneissosity (horizontal, inclined, vertical) . . . .
Fault (assumed) . . . . ~~~~~~
Thrust fault (teeth in direction of dip; assumed) . . . . ▲▲▲▲
Anticline (normal, overturned) . . . .
Syncline . . . .
Fossil locality . . . . Ⓕ
Former placer operation (gold) . . . . ✕
Mineral occurrence . . . . ×
Mining property adit (1, Canalask Nickel Mines; 2, Hudson Bay Mining and Smelting Co.) . . . . ≻

MINERAL OCCURRENCES

Coal	**C**	*Molybdenum*	**Mo**
Copper	**Cu**	*Nickel*	**Ni**
Fluorite	**fl**	*Platinum*	**Pt**
Gypsum	**gyp**	*Tungsten*	**W**

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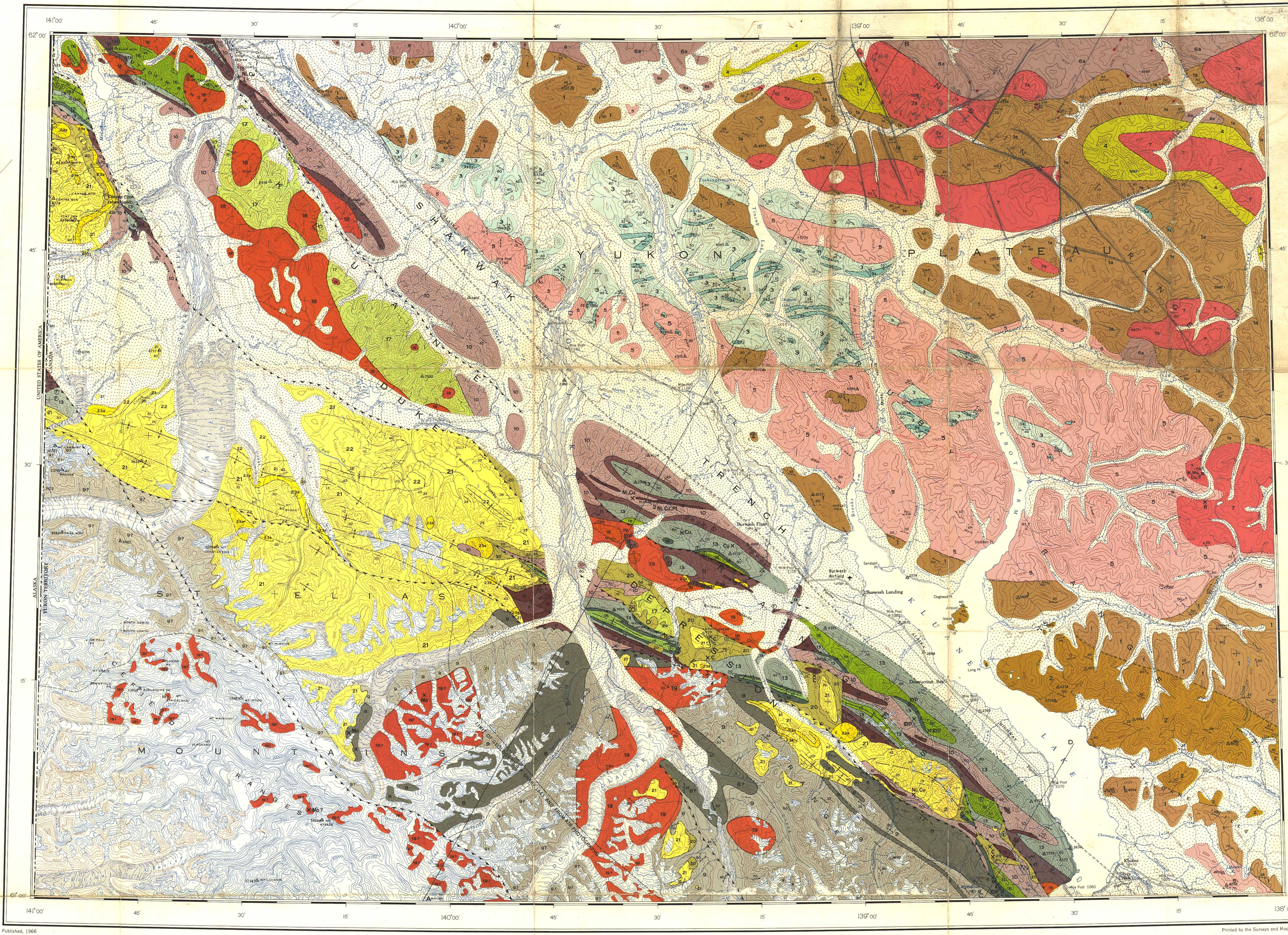

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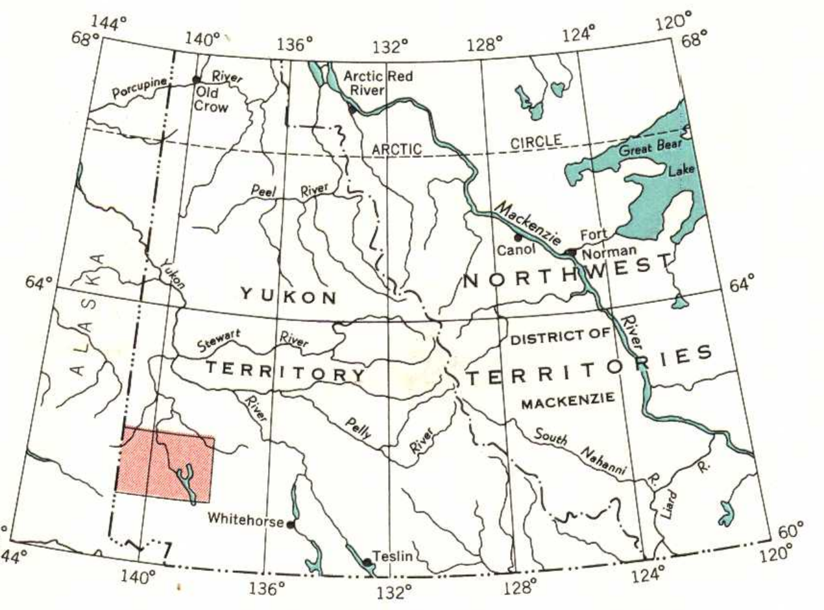


INDEX MAP

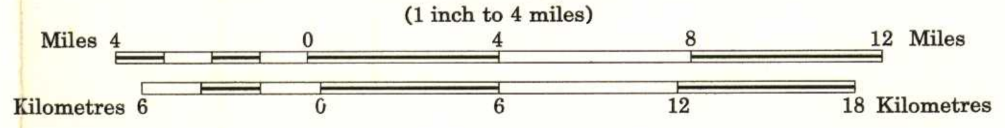
MAP 1177A

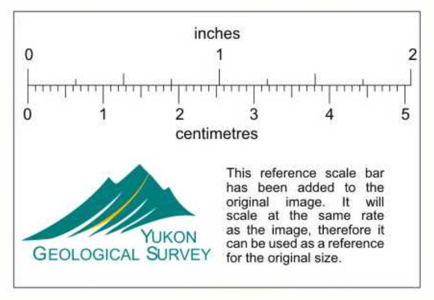
GEOLOGY

KLUANE LAKE

YUKON TERRITORY

Scale 1:253,440
(1 inch to 4 miles)





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LEGEND

Road, all weather . . . . ═══
Road, dry weather . . . . ═ ═ ═
Cart track . . . . – – – –
Trail or portage . . . . - - - - -
International boundary . . . . — - - —
Boundary monument . . . . ⊡
Horizontal control point . . . . △
Post Office . . . . P
Glacier . . . .
Intermittent stream . . . .
Marsh . . . .
Dry river bed . . . .
Sand or mud . . . .
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Contours (interval 500 feet) 3500
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