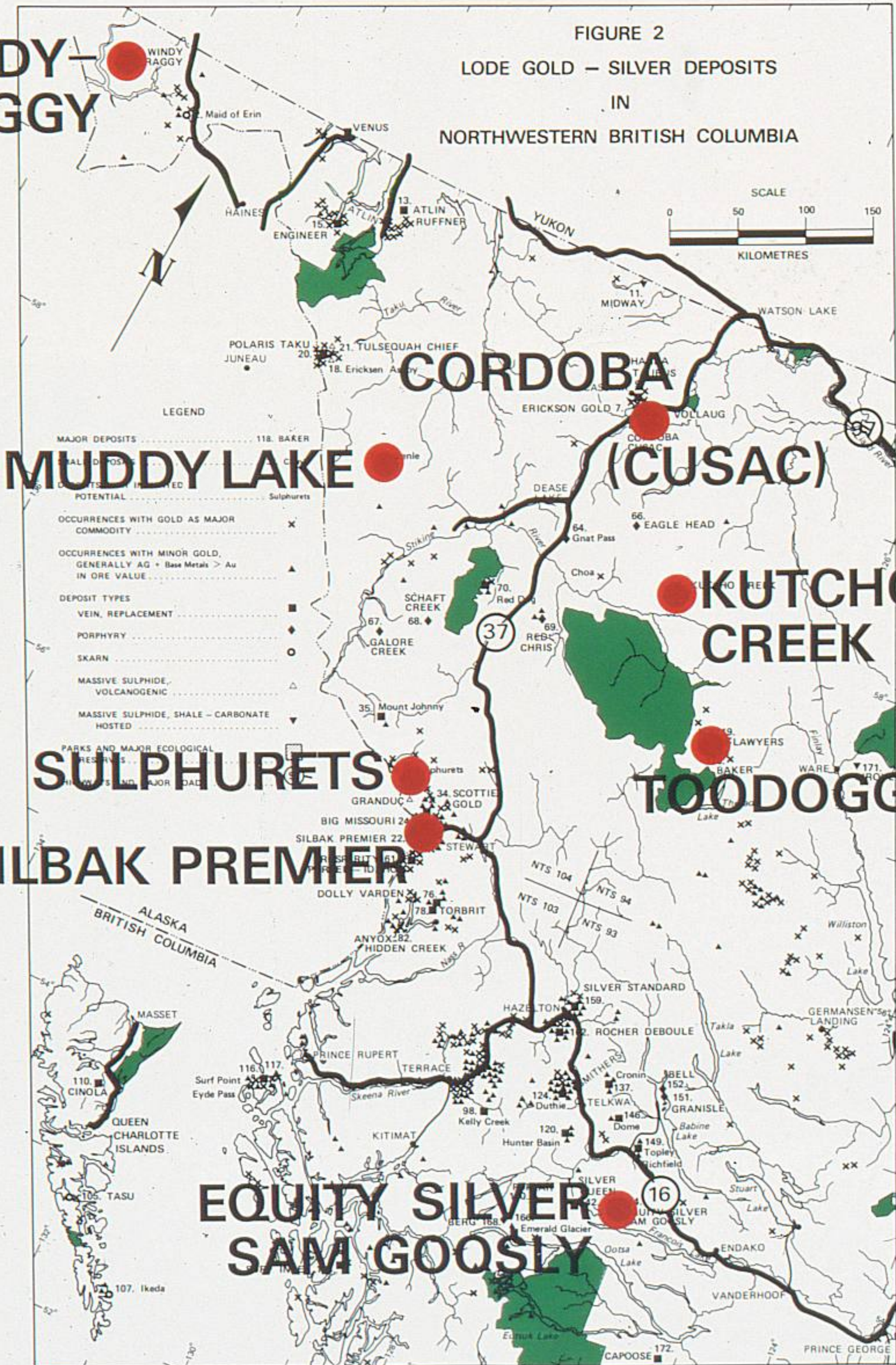


LODE GOLD — SILVER DEPOSITS IN NORTHWESTERN BRITISH COLUMBIA

WINDY-CRAGGY

FIGURE 2
LODE GOLD — SILVER DEPOSITS
IN
NORTHWESTERN BRITISH COLUMBIA



SILBAK PREMIER

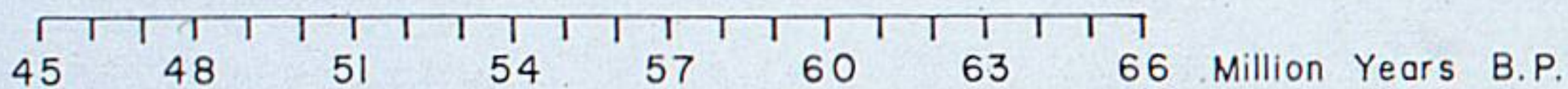
EQUITY SILVER (SAM GOOSLY)

TABLE OF FORMATIONS

SEDIMENTARY AND VOLCANIC ROCKS

ERA	PERIOD	EPOCH	FORMATION	LITHOLOGY
CENOZOIC	TERTIARY	EOCENE AND MIOCENE	ENDAKO GROUP GOOSLY LAKE AND BUCK CREEK VOLCANICS	BASALT AND ANDESITE FLOWS AND BRECCIAS, SOME RHYOLITE AND DACITE
UNCONFORMITY				
MESOZOIC AND CENOZOIC	CRETACEOUS AND TERTIARY	UPPER CRETACEOUS AND PALEOCENE	OOTSA LAKE GROUP TIP TOP HILL VOLCANICS	BASALT, ANDESITE, DACITE, AND RELATED TUFFS AND BRECCIAS, SOME RHYOLITE FLOWS AND BRECCIAS
			SUSTUT GROUP	SANDSTONE, CONGLOMERATE, MUDSTONE, AND SHALE
UNCONFORMITY				
MESOZOIC	CRETACEOUS	LOWER CRETACEOUS	SKEENA GROUP BRIAN BORU AND REDROSE FORMATIONS	SILTSTONE, SANDSTONE, SHALE, PORPHYRITIC ANDESITE, BRECCIAS AND TUFFS
UNCONFORMITY				
	JURASSIC AND CRETACEOUS	MIDDLE JURASSIC AND CRETACEOUS	HAZELTON GROUP (IN PART) KASALKA GROUP (IN PART)	ANDESITE, BASALT AND DACITE TUFFS AND BRECCIAS, VOLCANIC SANDSTONE AND CONGLOMERATE, SILTSTONE, ARGILLITE AND GREYWACKE
LOCAL UNCONFORMITY				
		LOWER JURASSIC	HAZELTON GROUP	GREEN, RED, AND PURPLE ANDESITE AND BASALT AND BRECCIAS, VOLCANIC SANDSTONE AND CONGLOMERATE, ARGILLITE AND GREYWACKE
INTRUSIVE ROCKS				
CENOZOIC	TERTIARY	MIDDLE EOCENE	GOOSLY LAKE INTRUSIONS ALICE ARM INTRUSIONS NANIKA INTRUSIONS BABINE INTRUSIONS	GABBRO SYENOMONZONITE QUARTZ MONZONITE AND GRANITE PORPHYRY QUARTZ MONZONITE PORPHYRY, FELDSPAR PORPHYRY, AND FELSITE QUARTZ DIORITE AND GRANO- DIORITE PORPHYRY
MESOZOIC	CRETACEOUS	UPPER CRETACEOUS	BULKLEY INTRUSIONS	PORPHYRITIC QUARTZ MON- ZONITE AND GRANODIORITE
	JURASSIC	UPPER JURASSIC	FRANCOIS LAKE INTRUSIONS	PORPHYRITIC QUARTZ MON- ZONITE, GRANODIORITE, AND QUARTZ DIORITE

K-Ar RADIOMETRIC AGE DATES - EQUITY SILVER MINE



48.3 ± 3.0

-----+----- Gabbro-Monzonite Complex

48.7 ± 1.8

.....|..... "

48.8 ± 1.9

-----+----- "

54.3

---+---

"

48.3 ± 2.0

-----+----- Quartz Latite Dyke (Southern Tail)

49.9 ± 2.0

-----+----- "

51.7 ± 1.9

-----+----- "

50.7 ± 1.8

-----+----- Andesite Dyke (Southern Tail)

48.3 ± 1.7

-----+----- Sericitized Dust Tuff (Main Zone)

58.1 ± 2.0

-----+----- Sericitized Dust Tuff (Southern Tail)

58.2 ± 2.0

-----+----- "

58.7 ± 2.0

-----+----- "

58.5 ± 2.0

-----+----- Tourmaline Breccia (Volcanic Flow Division)

56.2 ± 3.0

-----+----- Quartz Monzonite Stock

56.2 ± 2.3

-----+----- "

60.0 ± 3.2

-----+----- "

62.7

---+---

"



MATERIAL ANALYZED

-----+----- Whole Rock

-----+----- Biotite

.....|..... Feldspar

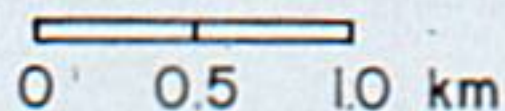


EQUITY SILVER MINES LIMITED

FIGURE LOCAL GEOLOGY

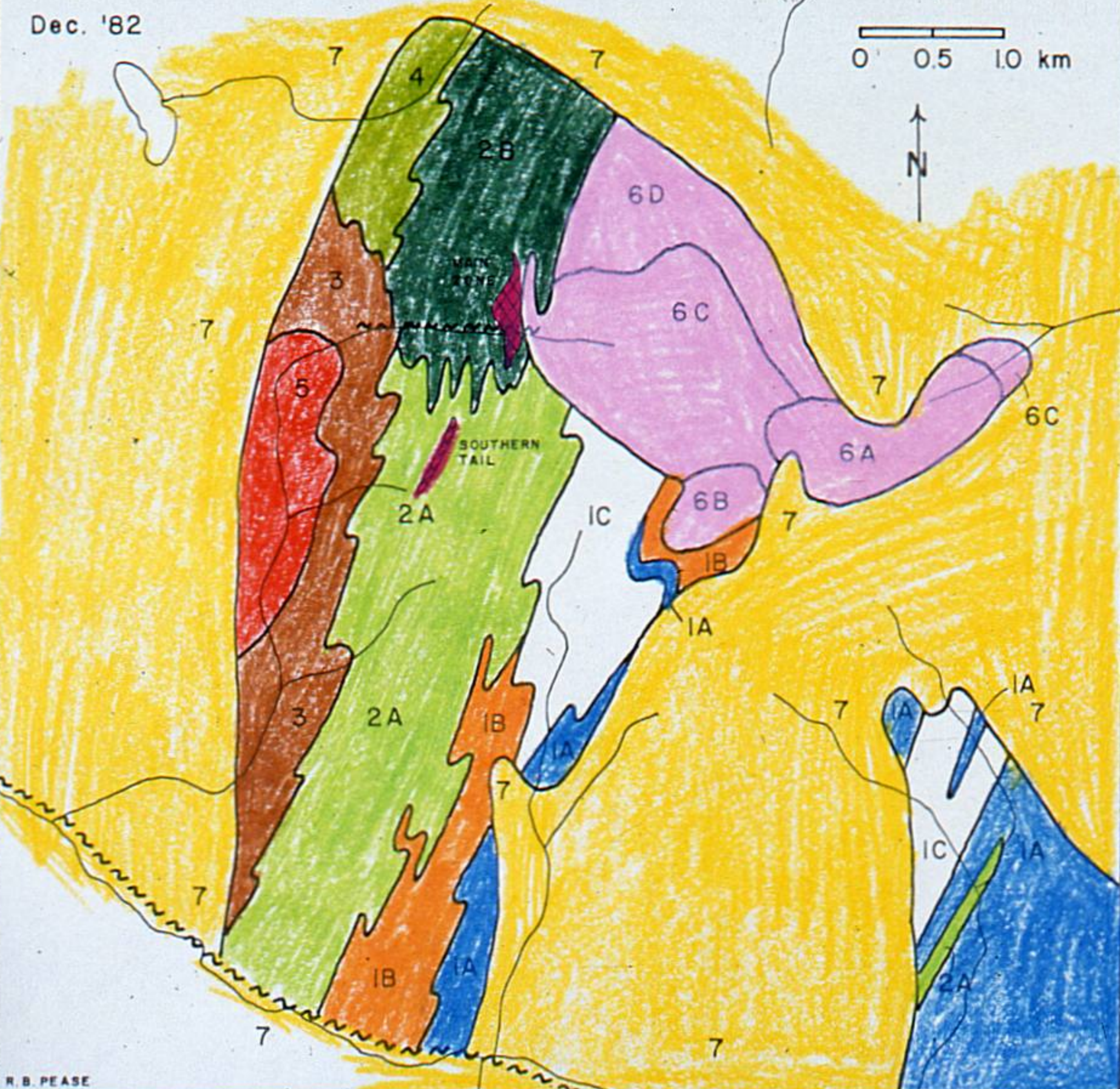
Dec. '82

SCALE
1:50,000



LITHOSTRATIGRAPHIC LEGEND

PERIOD	UNIT	LITHOLOGY
Tertiary	7	Andesitic Flows and Flow Breccias
	6	Gabbro Monzonite Intrusive
	6D	Hypabyssal monzonite
	6C	Monzonite
	6B	Diorite
6A	Gabbro	
Cretaceous	5	Quartz Monzonite Intrusive
	4	Volcanic Flow Division Dacite and Andesite Flows
	3	Sedimentary-Volcanic Division Volcanic Sandstone and Conglomerate, Tuff, Chert Pebble Conglomerate
	2	Pyroclastic Division
	2B	Lapilli and Ash Tuff, Volcanic Breccia, minor Sandstone and Conglomerate
	2A	Dust Tuff, minor Sandstone and Conglomerate
1	Clastic Division	
IC	Chert Pebble Conglomerate	
IB	Cherty and Silty Argillite	
IA	Polymictic Conglomerate, minor Sandstone and Siltstone	





TATSAMENIE LAKE

ULTRAMAFIC FAULT

WEST WALL FAULT

BEAR FAULT

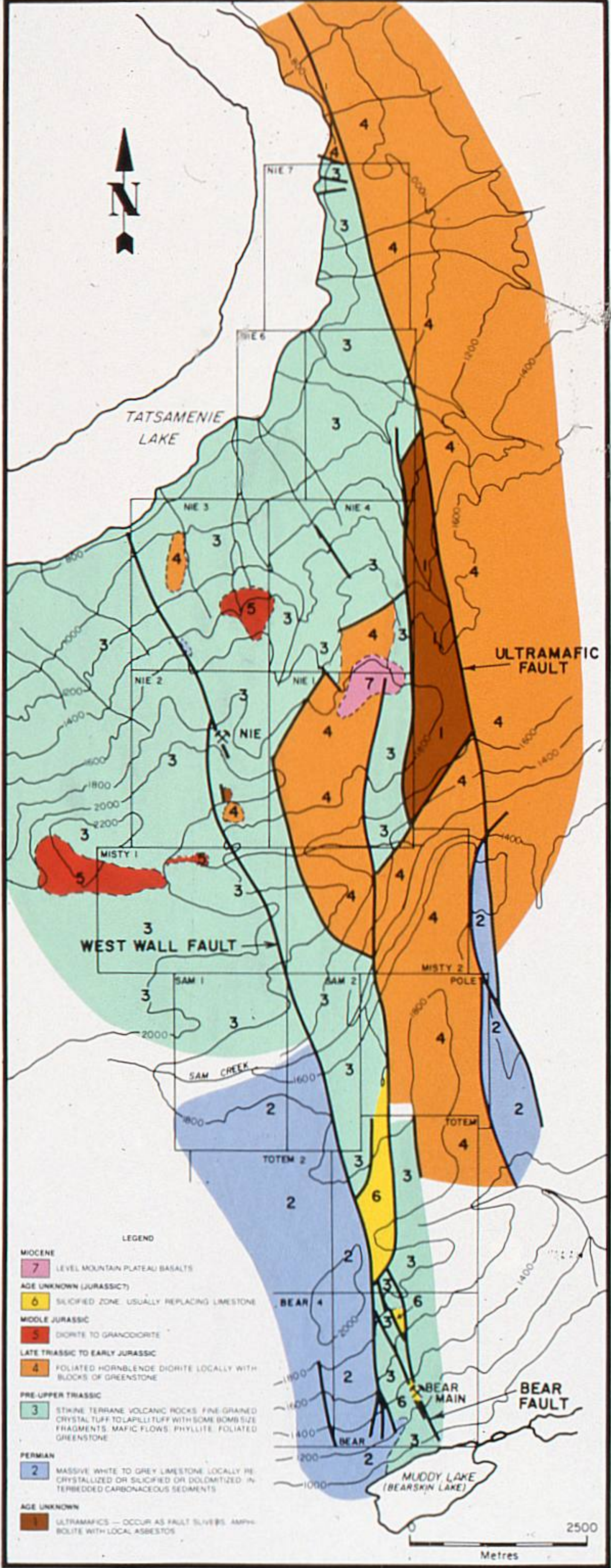
BEAR MAIN

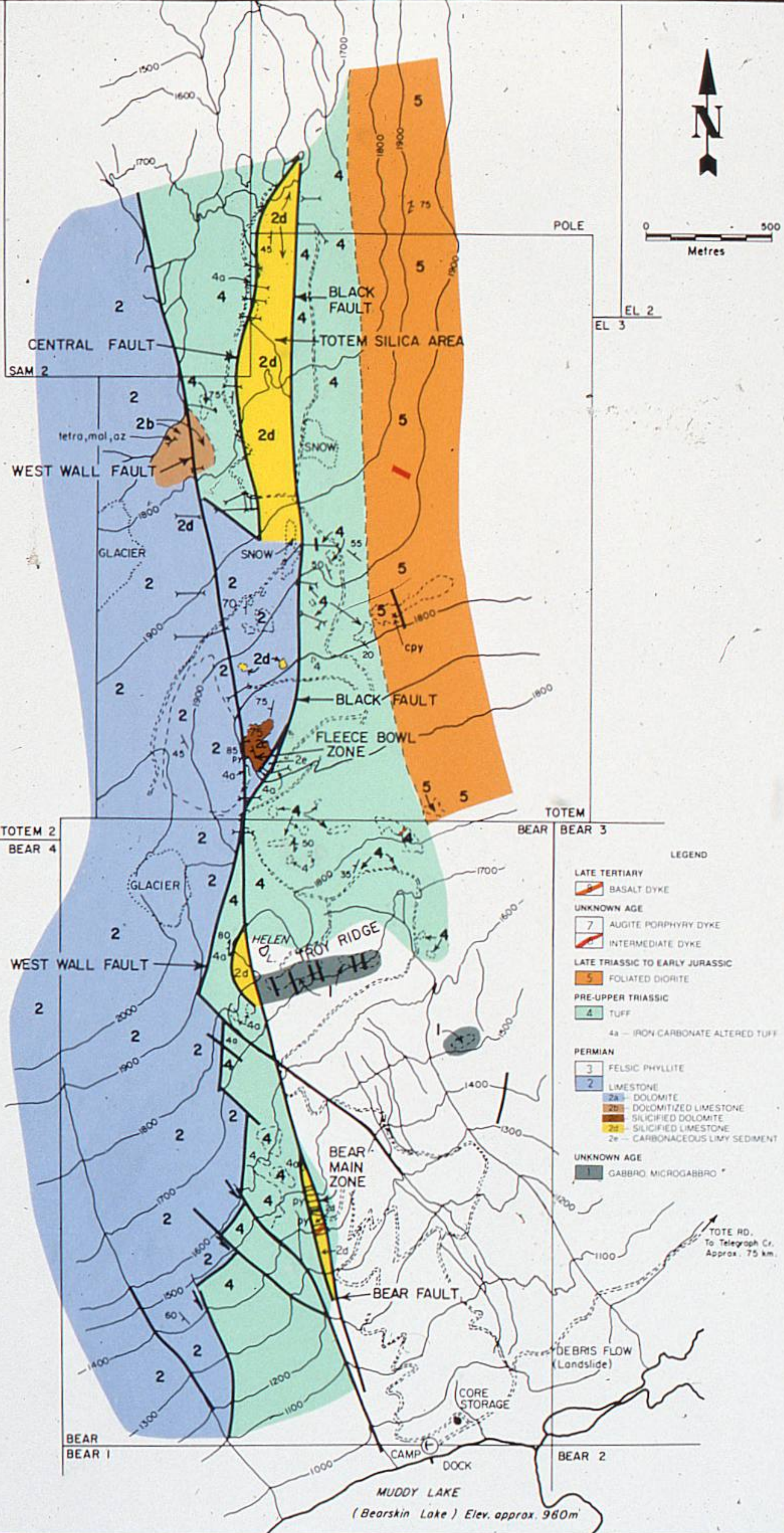
MUDDY LAKE (BEARSKIN LAKE)

- LEGEND**
- MIOCENE**
 - 7 LEVEL MOUNTAIN PLATEAU BASALTS
 - AGE UNKNOWN (JURASSIC?)**
 - 6 SILICIFIED ZONE, USUALLY REPLACING LIMESTONE
 - MIDDLE JURASSIC**
 - 5 DIORITE TO GRANODIORITE
 - LATE TRIASSIC TO EARLY JURASSIC**
 - 4 FOLIATED HORNBLENDE DIORITE LOCALLY WITH BLOCKS OF GREENSTONE
 - PRE-UPPER TRIASSIC**
 - 3 STIKINE TERRANE VOLCANIC ROCKS, FINE-GRAINED CRYSTAL TUFF TO LAPILLI TUFF WITH SOME BOMB SIZE FRAGMENTS, MAFIC FLOWS, PHYLLITE, FOLIATED GREENSTONE
 - PERMIAN**
 - 2 MASSIVE WHITE TO GREY LIMESTONE, LOCALLY RE-CRYSTALLIZED OR SILICIFIED OR DOLARITIZED IN-TERBEDDED CARBONACEOUS SEDIMENTS
 - AGE UNKNOWN**
 - 1 ULTRAMAFICS — OCCUR AS FAULT SLIVERS, AMPHIBOLITE WITH LOCAL ASBESTOS

2500

Metres





LEGEND	
LATE TERTIARY	
	BASALT DYKE
UNKNOWN AGE	
	AUGITE PORPHYRY DYKE
	INTERMEDIATE DYKE
LATE TRIASSIC TO EARLY JURASSIC	
	FOLIATED DIORITE
PRE-UPPER TRIASSIC	
	TUFF
4a	IRON CARBONATE ALTERED TUFF
PERMIAN	
	FELSIC PHYLLITE
	LIMESTONE
2a	DOLOMITE
2b	DOLOMITIZED LIMESTONE
2c	SILICIFIED DOLOMITE
2d	SILICIFIED LIMESTONE
2e	CARBONACEOUS LIMY SEDIMENT
UNKNOWN AGE	
	GABBRO MICROGABBRO

TOTE RD.
To Telegraph Cr.
Approx. 75 km.

MUDDY LAKE
(Bearskin Lake) Elev. approx. 980m



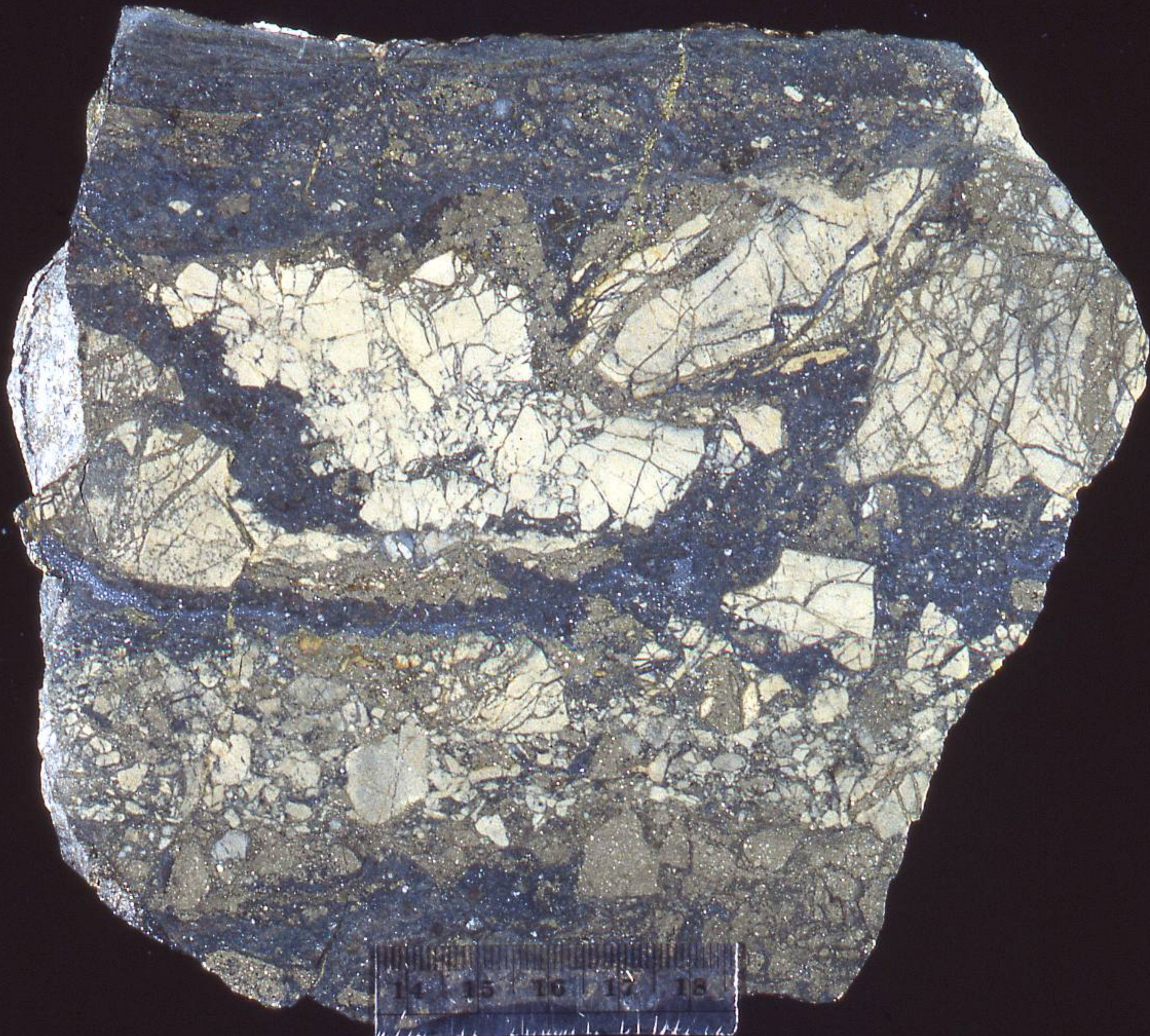
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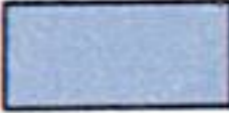
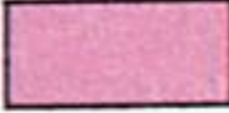






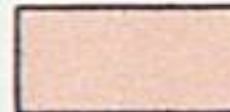


0 1 2 cm
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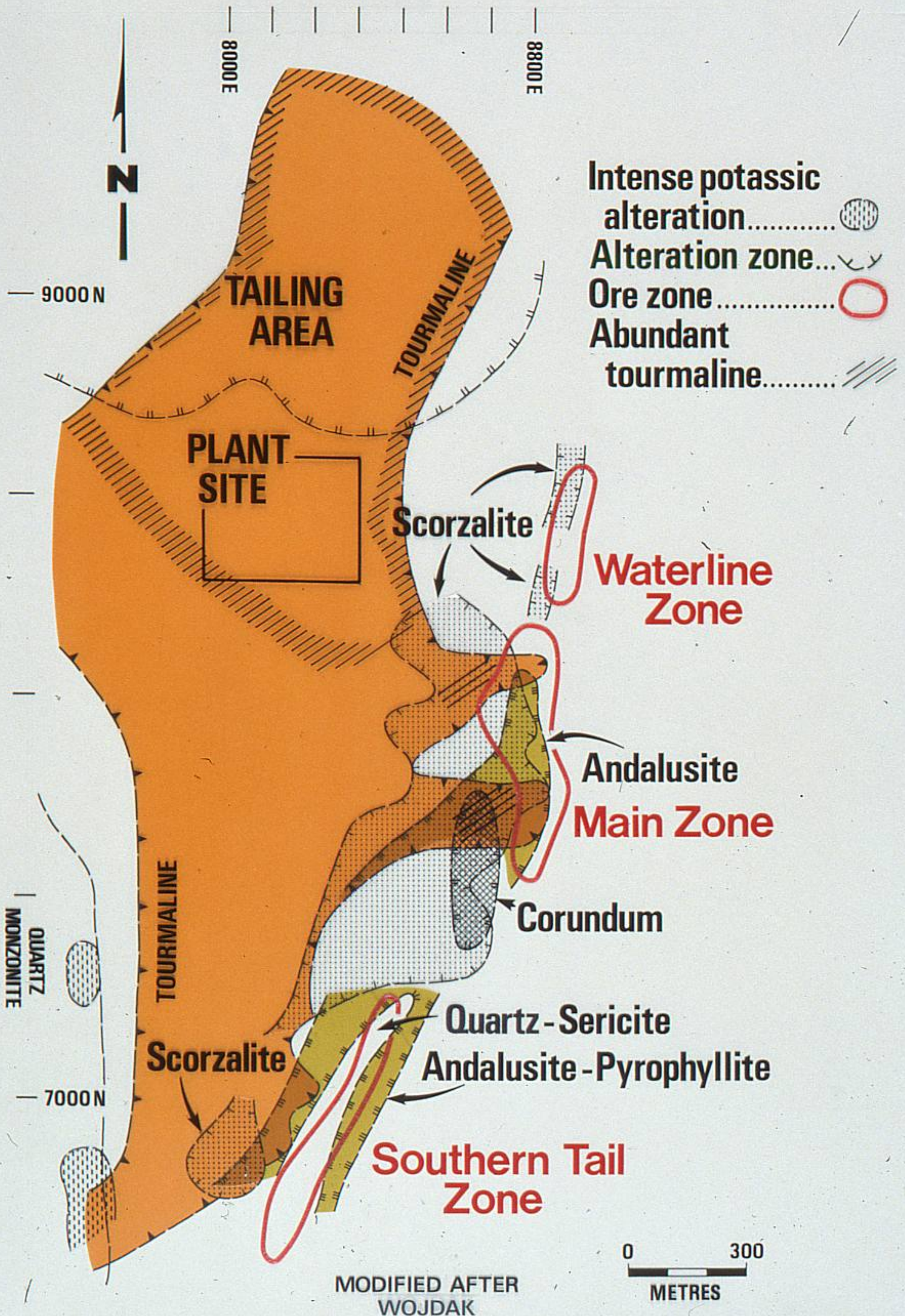
LITHOSTRATIGRAPHIC LEGEND

PERIOD OR EPOCH	UNIT	LITHOLOGY
MIOCENE (ENDAKO GROUP)		GOOSLY LAKE VOLCANIC ROCKS UNDIFFERENTIATED FLOW BRECCIA, AMYGDALOIDAL ANDESITE, TRACHYANDESITE FLOWS
		GABBRO-MONZONITE INTRUSIVE COMPLEX (48±2 Ma)
		HYPABYSSAL MONZONITE PORPHYRY, MONZONITE, DIORITE, GABBRO
(NANIKA INTRUSIONS)		COPPER - SILVER MINERALIZATION (>30 GRAMS PER TONNE EQUIVALENT*)
		QUARTZ MONZONITE STOCK (58±2 Ma)

CRETACEOUS		VOLCANIC FLOW DIVISION UNDIFFERENTIATED DACITE AND ANDESITE FLOWS
'GOOSLY SEQUENCE' (KASALKA GROUP?) (HAZELTON GROUP?)		SEDIMENTARY-VOLCANIC DIVISION VOLCANIC CONGLOMERATE AND SANDSTONE, MINOR TUFFS
		THINLY LAMINATED DUST TUFF
		WHITE CHERT PEBBLE CONGLOMERATE
		PYROCLASTIC DIVISION LAPILLI AND ASH TUFFS, VOLCANIC BRECCIA, MINOR VOLCANIC SANDSTONE AND CONGLOMERATE
		DUST TUFF
		CLASTIC DIVISION CHERT PEBBLE CONGLOMERATE
		CHERTY ARGILLITE AND THINLY LAMINATED CARBONACEOUS ARGILLITE
		POLYMICTIC CONGLOMERATE

*10 PER CENT COPPER = 46 GRAMS PER TONNE SILVER

ALTERATION MAP, EQUITY SILVER MINE





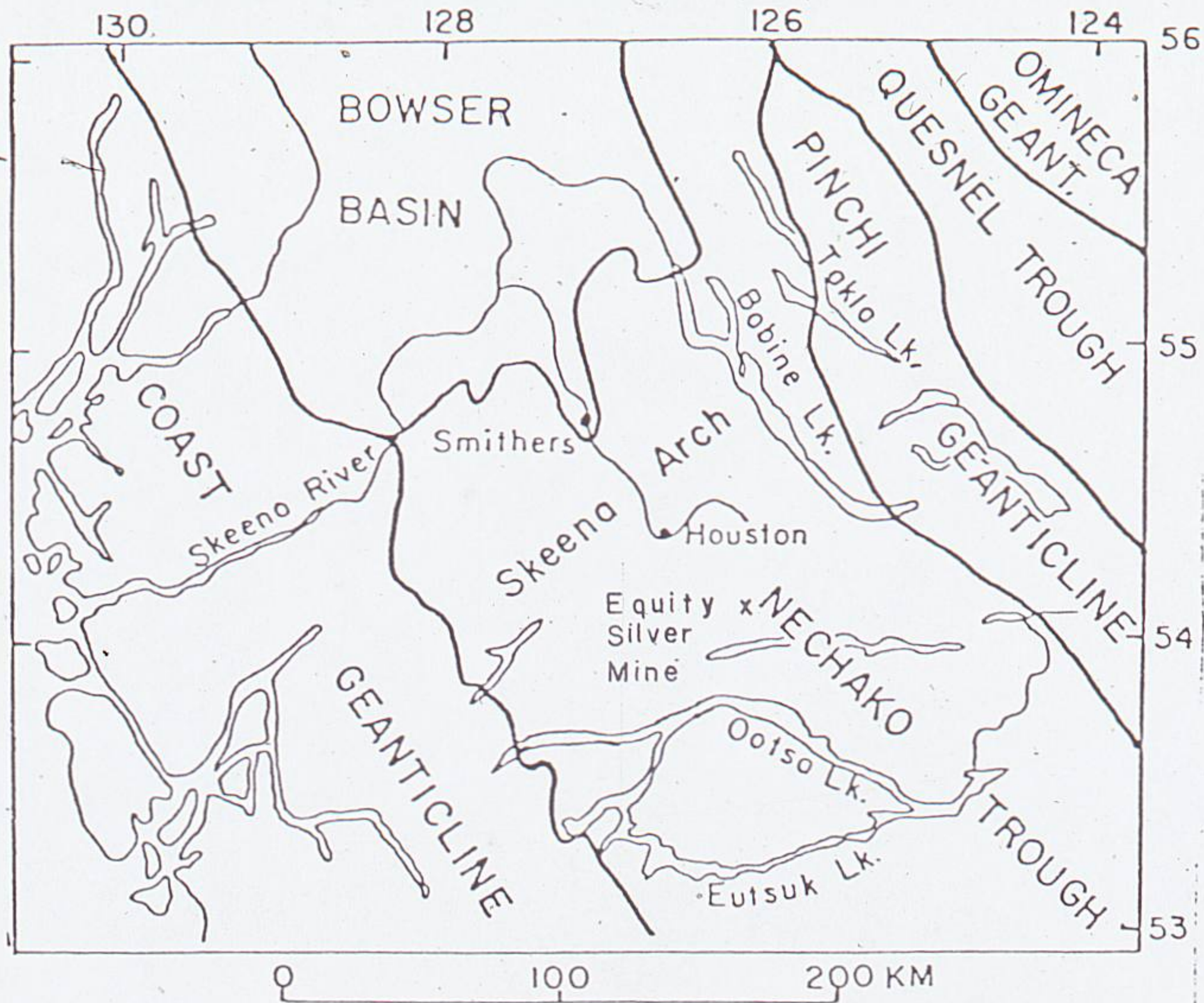
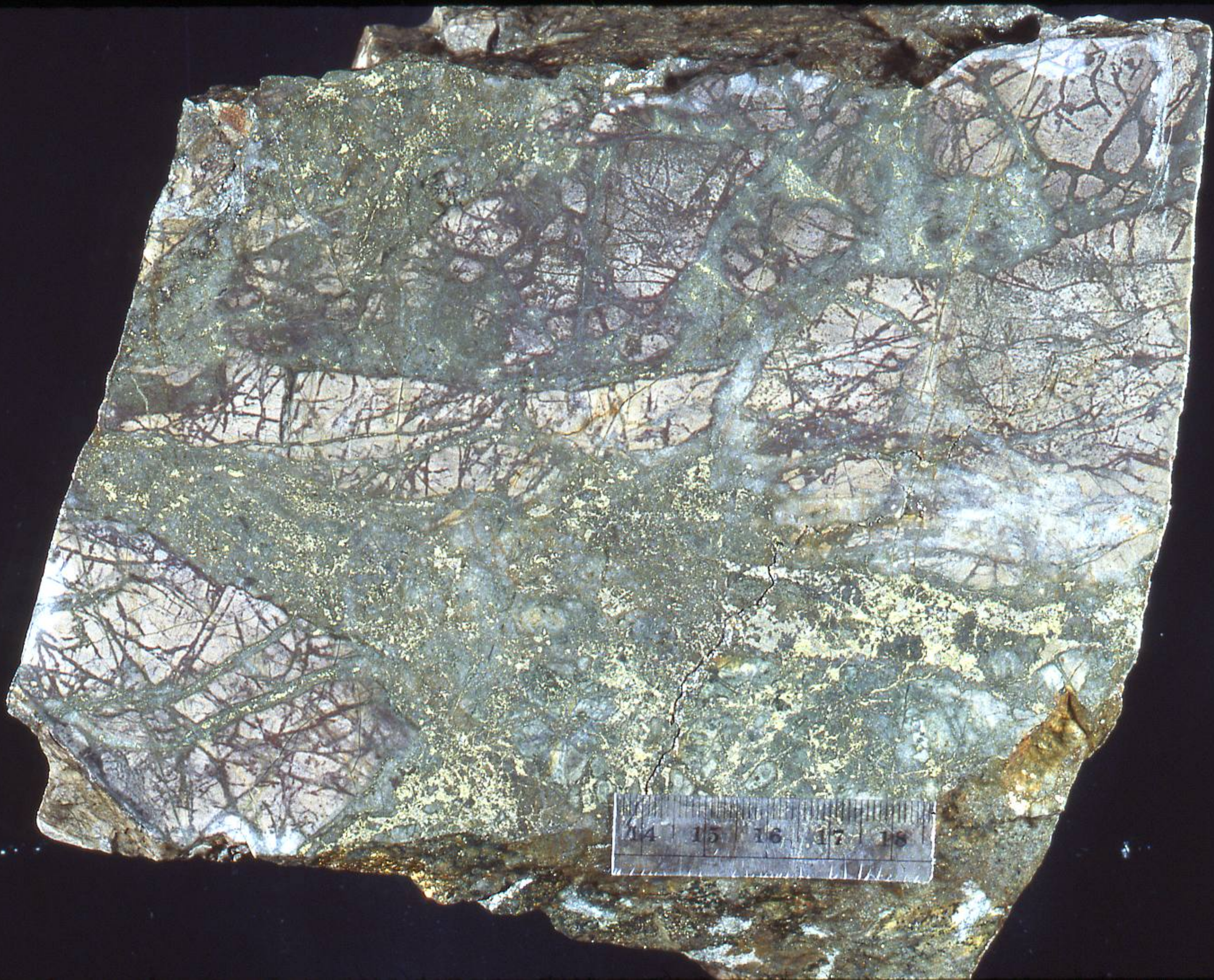
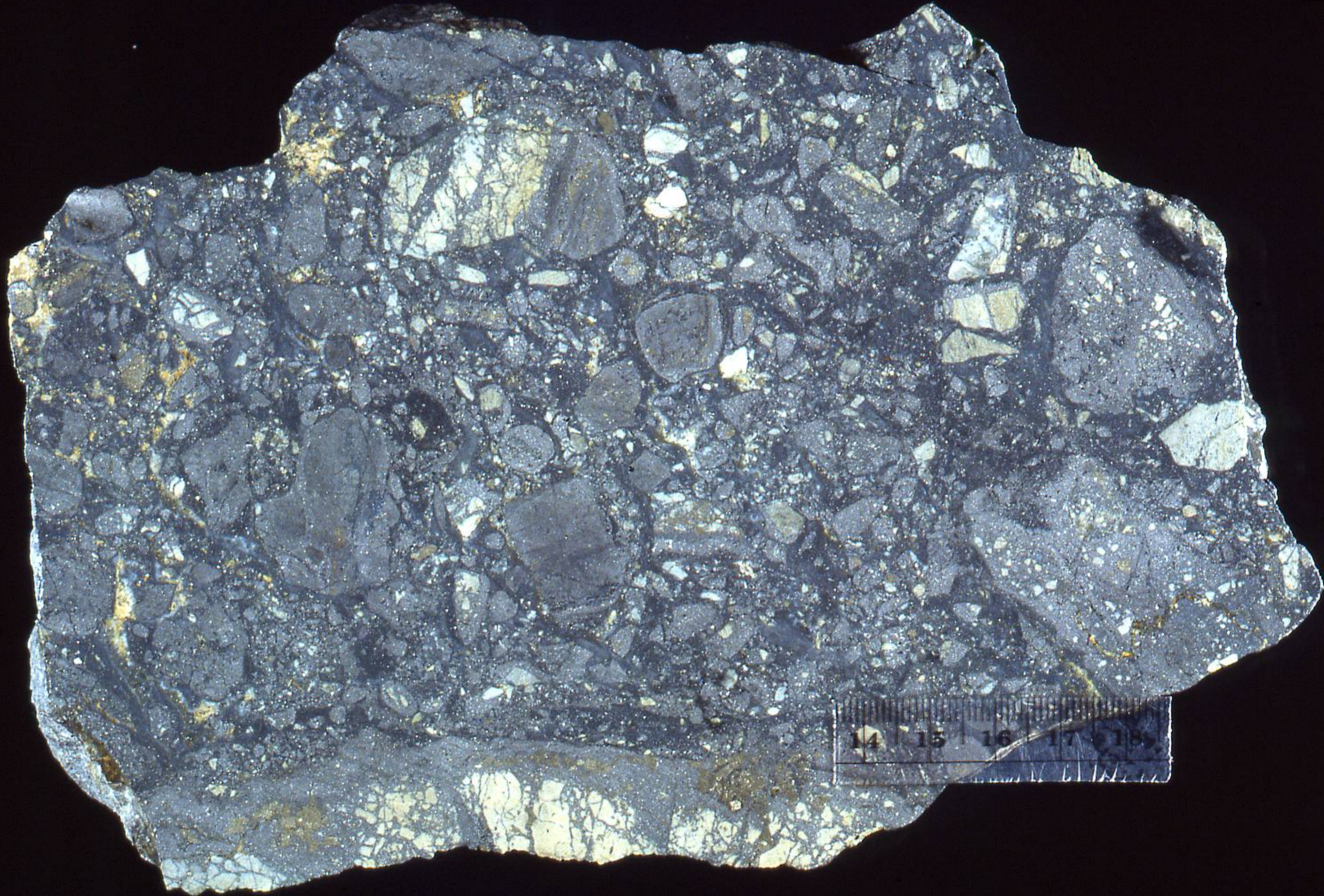


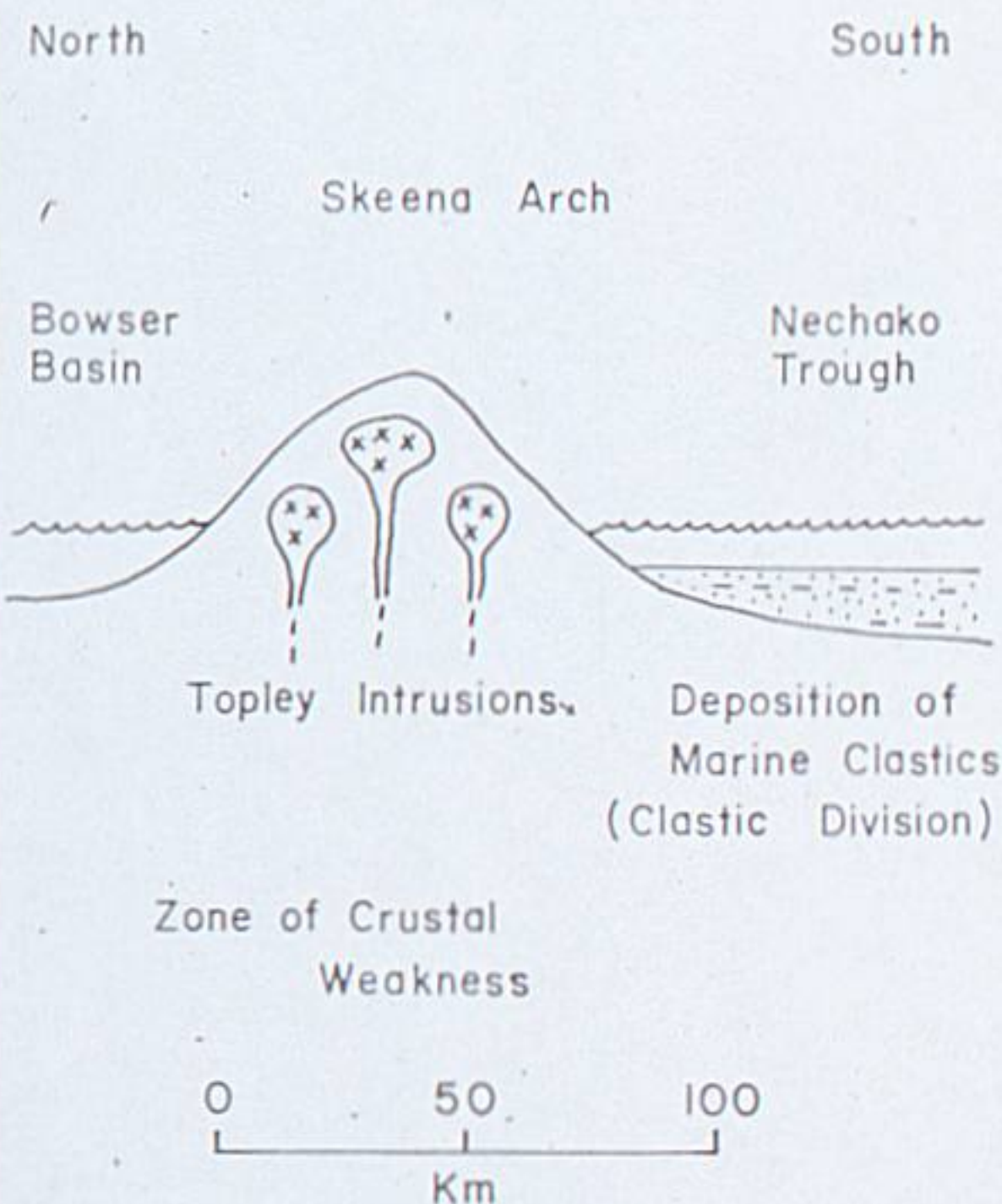
FIG. Regional Tectonic Setting (After Wheeler, et al, 1972)



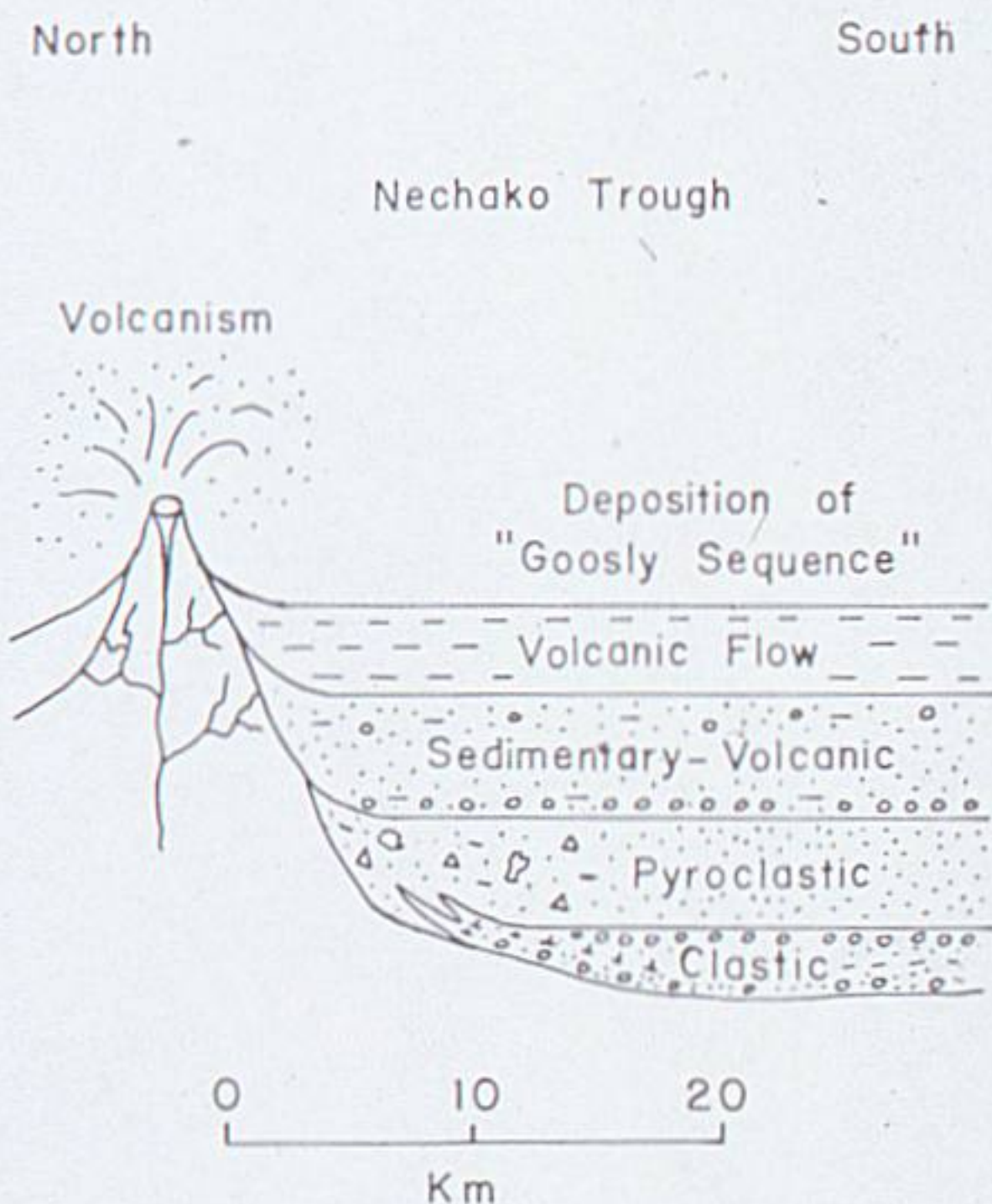


SCHEMATIC HISTORICAL GEOLOGY - EQUITY SILVER MINE

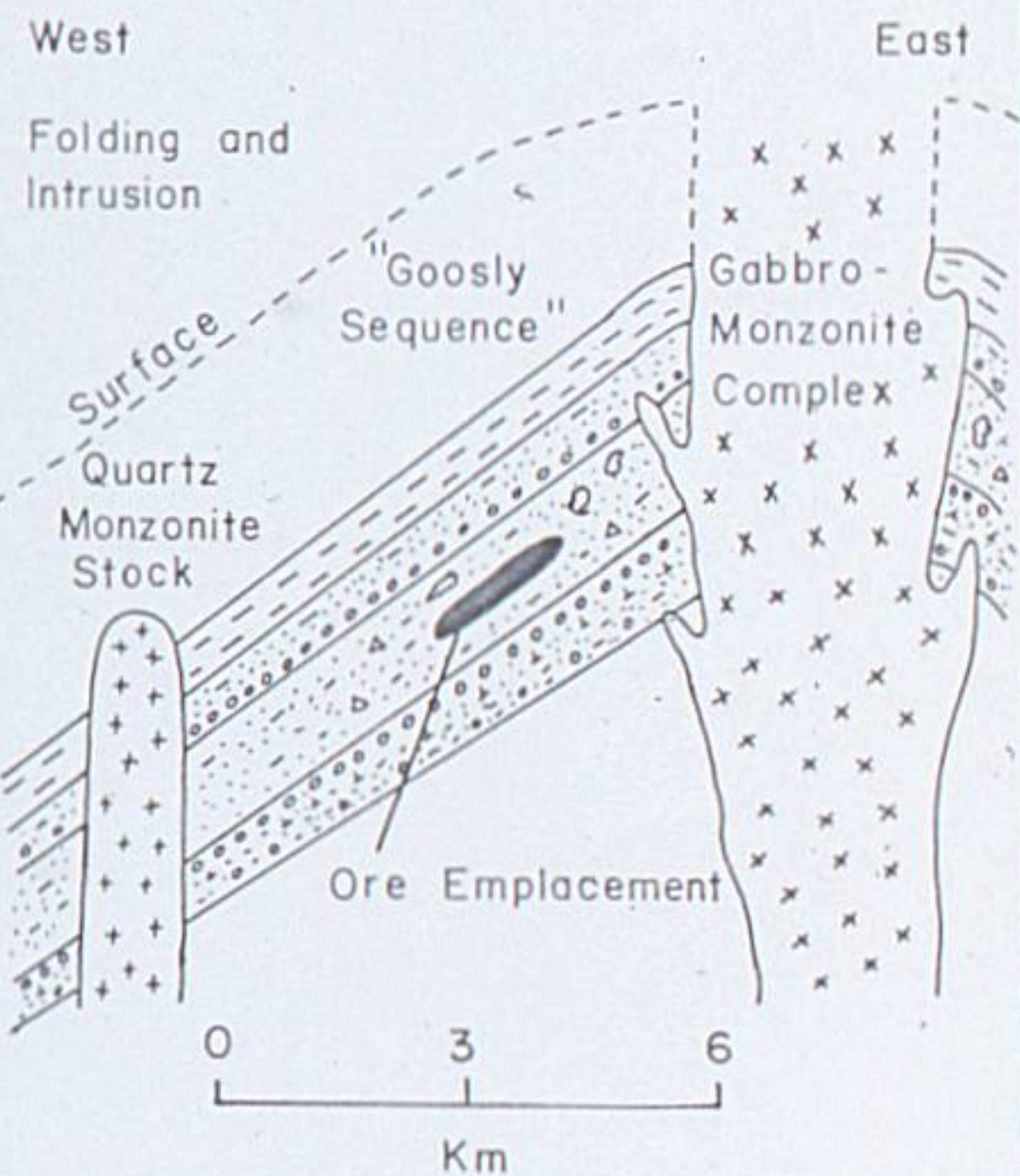
I. JURASSIC - LOWER CRETACEOUS



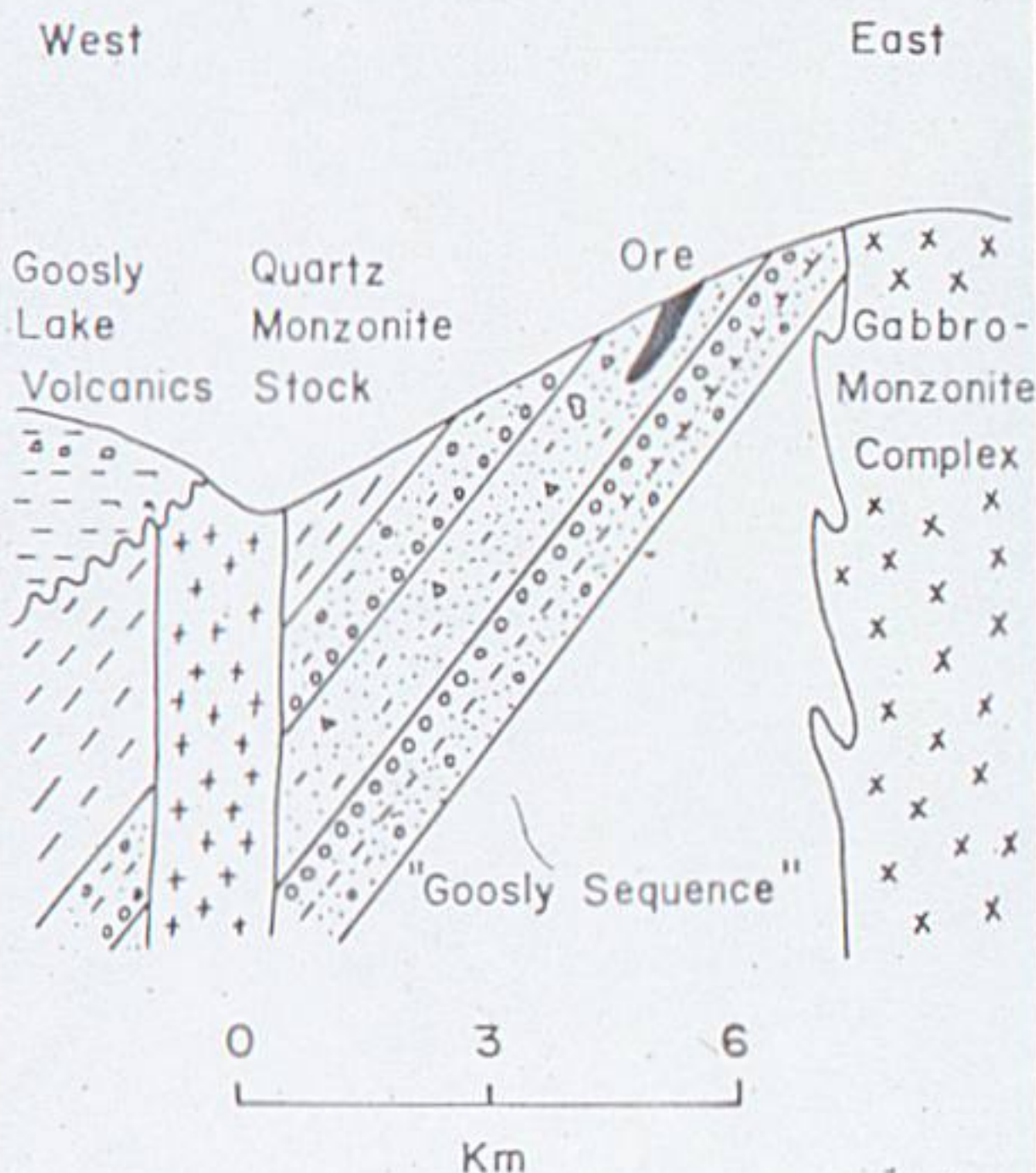
2. UPPER CRETACEOUS



3. TERTIARY



4. PRESENT



STRATIGRAPHIC COLUMN - EQUITY SILVER MINE

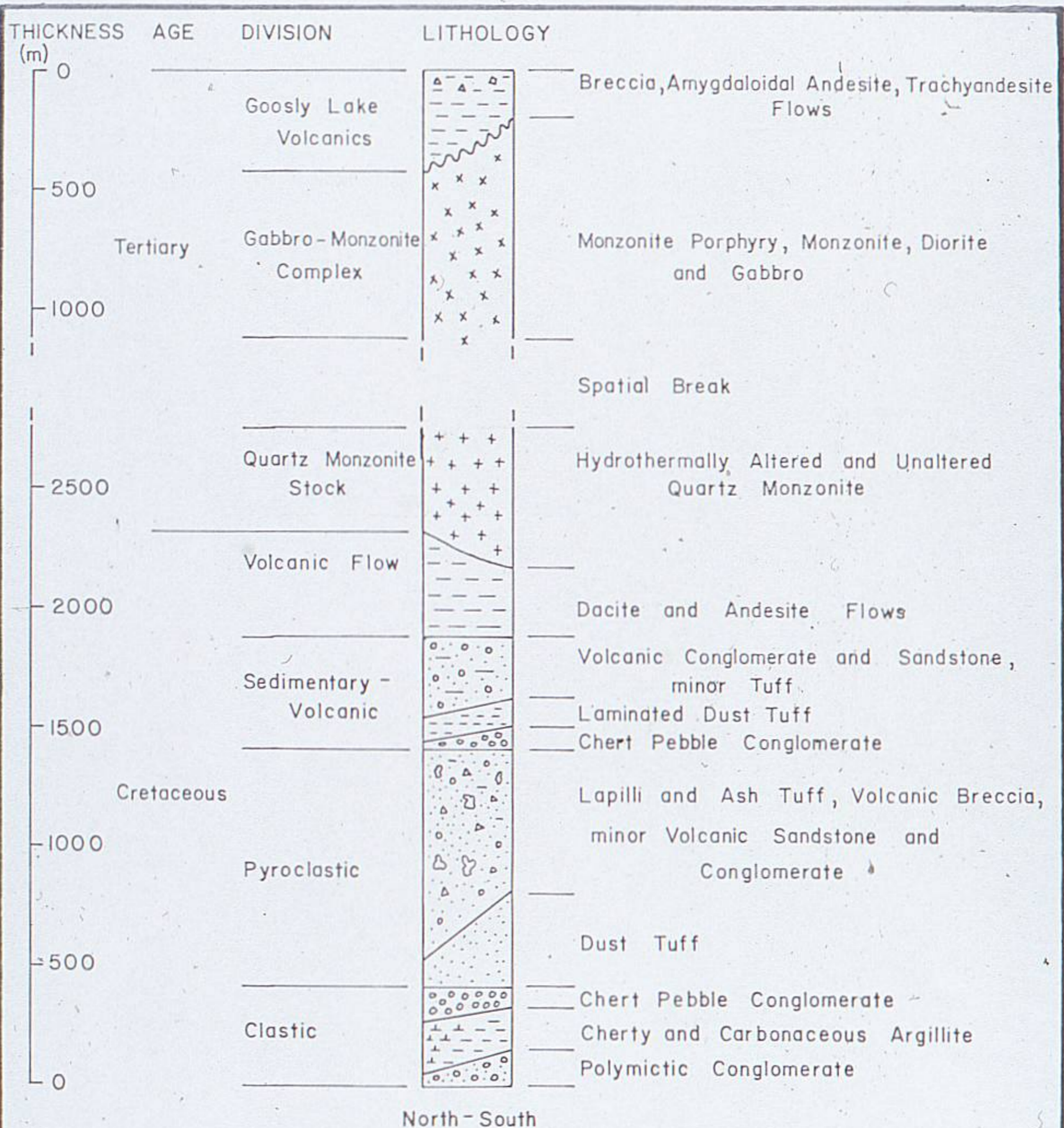


TABLE OF FORMATIONS - EQUITY SILVER MINES

SEDIMENTARY AND VOLCANIC ROCKS

ERA	PERIOD OR EPOCH	FORMATION	DIVISION	LITHOLOGY
Cenozoic	Tertiary, Miocene	Endako Group	Goosly Lake Volcanics	Flow Breccia, Amygdaloidal Andesite and Trachyandesite Flows
Unconformity				
Mesozoic	Upper Cretaceous	Kasalka Group (in part)	Volcanic Flow	Dacite and Andesite Flows
			Sedimentary-Volcanic	Volcanic Conglomerate and Sandstone, Tuffs, Chert Pebble Conglomerate
	-----?-----	-----?-----	Pyroclastic	Lapilli, Ash and Dust Tuff, Volcanic Breccia, Volcanic Sandstone and Conglomerate
	Middle Cretaceous	Hazelton Group (in part)	Clastic	Chert Pebble Conglomerate, Cherty and Carbonaceous argillite, Polymictic Conglomerate

INTRUSIVE ROCKS

ERA	PERIOD OR EPOCH	FORMATION	DIVISION	LITHOLOGY
Cenozoic	Tertiary, Eocene	Goosly Lake Intrusions	Dykes and Sills	Andesite, Trachyandesite and Quartz Latite Dykes
			Gabbro-Monzonite Complex	Monzonite porphyry, Monzonite, Diorite and Gabbro
		Nanika Intrusions	Quartz Monzonite Stock	Hydrothermally Altered and Unaltered Quartz Monzonite

TABLE

COMPARATIVE MINERALOGY OF THE ORE DEPOSITS
AND OTHER MINERALIZED AREAS AT EQUITY SILVER MINE

RELATIVE ABUNDANCE

MINERAL ¹	MAIN ZONE	SOUTHERN TAIL	WATERLINE ZONE	Cu-Mo PORPHYRY ZONE	TOURMALINE ZONE
Pyrite	XXXXX	XXXXX	XXXXX	XXXX	XXXXX
Rutile	X	X	X	X	
Ilmenite	X	X			
Magnetite	XXXX	XXX	XXX	X	XX
Pyrrhotite	XXXX		XX		
Molybdenite		X	X	XXX	X
Specular Hematite	XXXX	XX	XXX		X
Arsenopyrite	XX	XXXXX	X		
Sphalerite	XXX	XXX	XXX		XX
Chalcopyrite	XXXXX	XXXX	XXXX	XX	XX
Tetrahedrite	XXXX	XXXXX	XX	X	X
Gold	XX	X	XX		
Galena	XX	XX	XX		XX
Sulfosalts	XX	XX	X		
Marcasite	XXX		X		
Chalcocite	X	X		X	
Covellite	X	X			
Scheelite			X		
Wolframite		X			
Stibnite	X				
Corundum	XX				
Andalusite	XX	XX	XX		
Tourmaline	XXXX	X	XX	X	XXXXX
Dumortierite	XX				X
Scorzalite	XXX	X	XX		
Spinel	XX				
Chlorite	XXXX	XXXX	XXX	XX	XX

¹ Listed in approximate order of paragenesis.

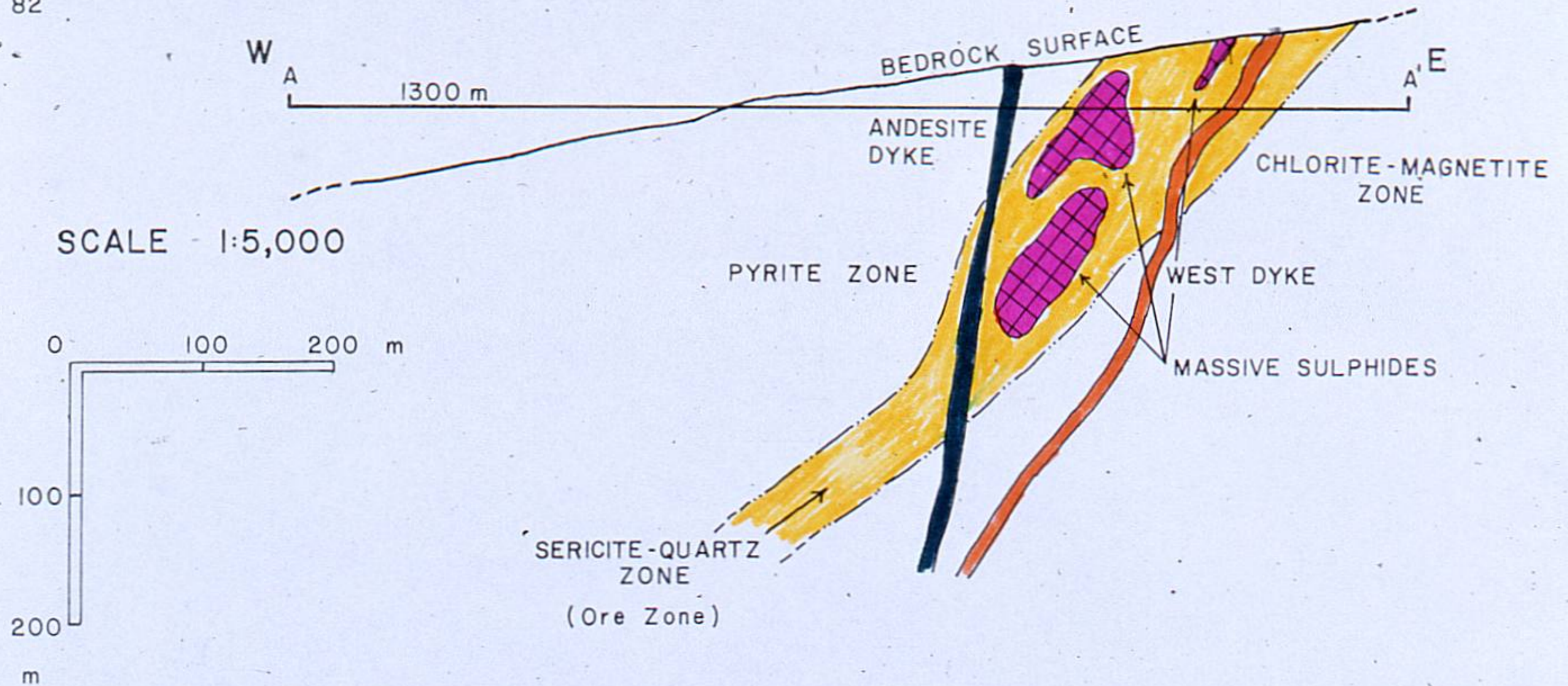
XXXXX = very abundant; XXXX = abundant; XXX = moderate; XX = minor; X = trace.

EQUITY SILVER MINES LIMITED

FIGURE SOUTHERN TAIL ORE ZONE - ALTERATION, SCHEMATIC PRESENTATION

SECTION 6802 N - VEIHING NORTH

Dec. '82

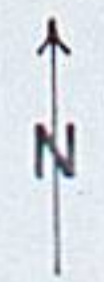
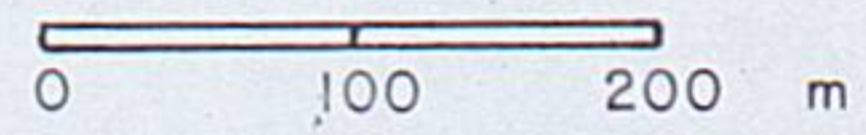


EQUITY SILVER MINES LIMITED

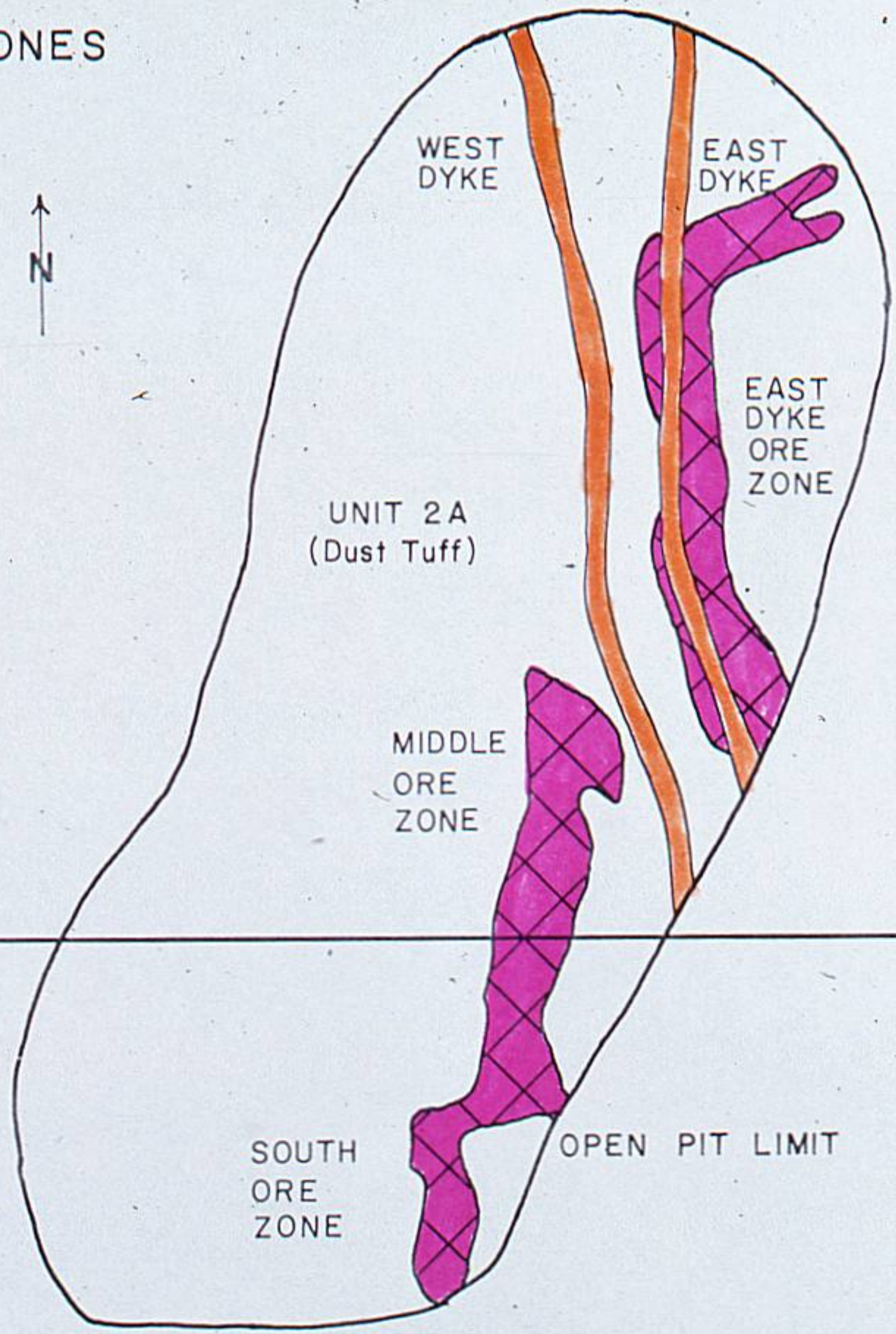
FIGURE SOUTHERN TAIL PIT - ORE ZONES
PLAN VIEW - 1300 BENCH

Dec. '82

SCALE 1:5,000



A SECTION 6802 N A'



TABLE

MINERALOGY OF ALTERATION MINERALS

	MINERAL	CHEMICAL FORMULA
ALUMINOUS MINERALS	ANDALUSITE	Al_2SiO_5
	SILLIMANITE	Al_2SiO_5
	CORUNDUM	Al_2O_3
	PYROPHYLLITE	$Al_2Si_4O_{10}(OH)_2$
	SPINEL	$(Fe, Mg)Al_2O_4$
	CHLORITE	$(Mg, Fe, Al)_6(Al, Si)_4O_{10}(OH)_8$
	MUSCOVITE (Sericite)	$KAl_2(AlSi_3)O_{10}(OH)_2$
BORON MINERALS	TOURMALINE	$Na(Mg, Fe)_3Al_6(BO_3)_3(Si_6O_{18})(OH)_4$
	DUMORTIERITE	$(Al, Fe)_7BSi_3O_{18}$
PHOSPHORUS MINERALS	SCORZALITE	$(Fe, Mg)Al_2(PO_4)_2(OH)_2$
	APATITE	$Ca_5(PO_4)_3F$
	AUGELITE	$Al_2(PO_4)(OH)_3$
	SVANBERGITE	$SrAl_3(PO_4)(SO_4)(OH)_6$

LEGEND

SEDIMENTARY AND VOLCANIC ROCKS

INTRUSIVE ROCKS

TERTIARY

EOCENE-MIOCENE

- 6 ENDAKO GROUP, GOOSLY LAKE AND BUCK CREEK VOLCANIC ROCKS - PLATEAU BASALT, ANDESITE FLOWS AND BRECCIAS, SOME RHYOLITE AND DACITE.

CRETACEOUS AND TERTIARY

UPPER CRETACEOUS - PALEOCENE

- 5 OOTSA LAKE GROUP, TIP TOP HILL VOLCANIC ROCKS - BASALT, ANDESITE, DACITE AND RELATED TUFFS AND BRECCIAS, SOME RHYOLITE FLOWS AND INTRUSIVE EQUIVALENTS.
- 4 SUSTUT GROUP (IN PART) - SANDSTONE, CONGLOMERATE, MUDSTONE, SHALE.

CRETACEOUS

LOWER CRETACEOUS

- 3 SKEENA GROUP, BRAIN BORU AND RED ROSE FORMATIONS - SILTSTONE, SANDSTONE, SHALE AND PORPHYRITIC ANDESITE FLOWS, BRECCIAS, AND TUFFS.

JURASSIC AND CRETACEOUS

MIDDLE JURASSIC - CRETACEOUS

- 2 HAZELTON GROUP (IN PART), KASALKA GROUP (IN PART) - ANDESITE, BASALT AND DACITE TUFFS AND BRECCIAS, VOLCANIC SANDSTONE AND CONGLOMERATE, SILTSTONE, ARGILLITE AND GREYWACKE.

LOWER JURASSIC

- 1 HAZELTON GROUP - GREEN, RED AND PURPLE ANDESITE AND BASALT TUFFS AND BRECCIAS, VOLCANIC SANDSTONE AND CONGLOMERATE, ARGILLITE AND GREYWACKE.

TERTIARY

EOCENE

- C GRANTIC ROCKS, GOOSLY LAKE, ALICE ARM, NANIKA, BABINE INTRUSIONS.

CRETACEOUS

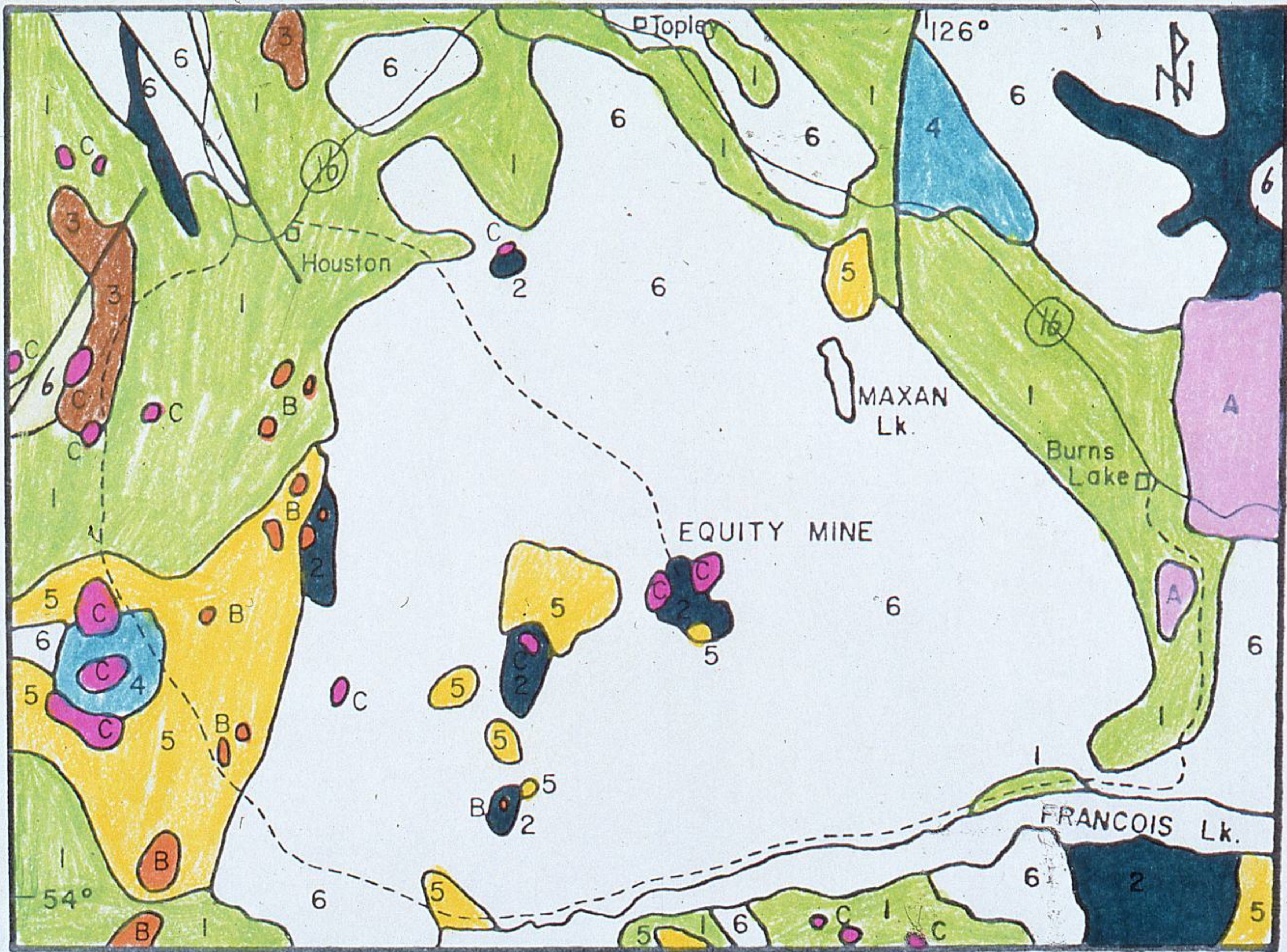
UPPER CRETACEOUS

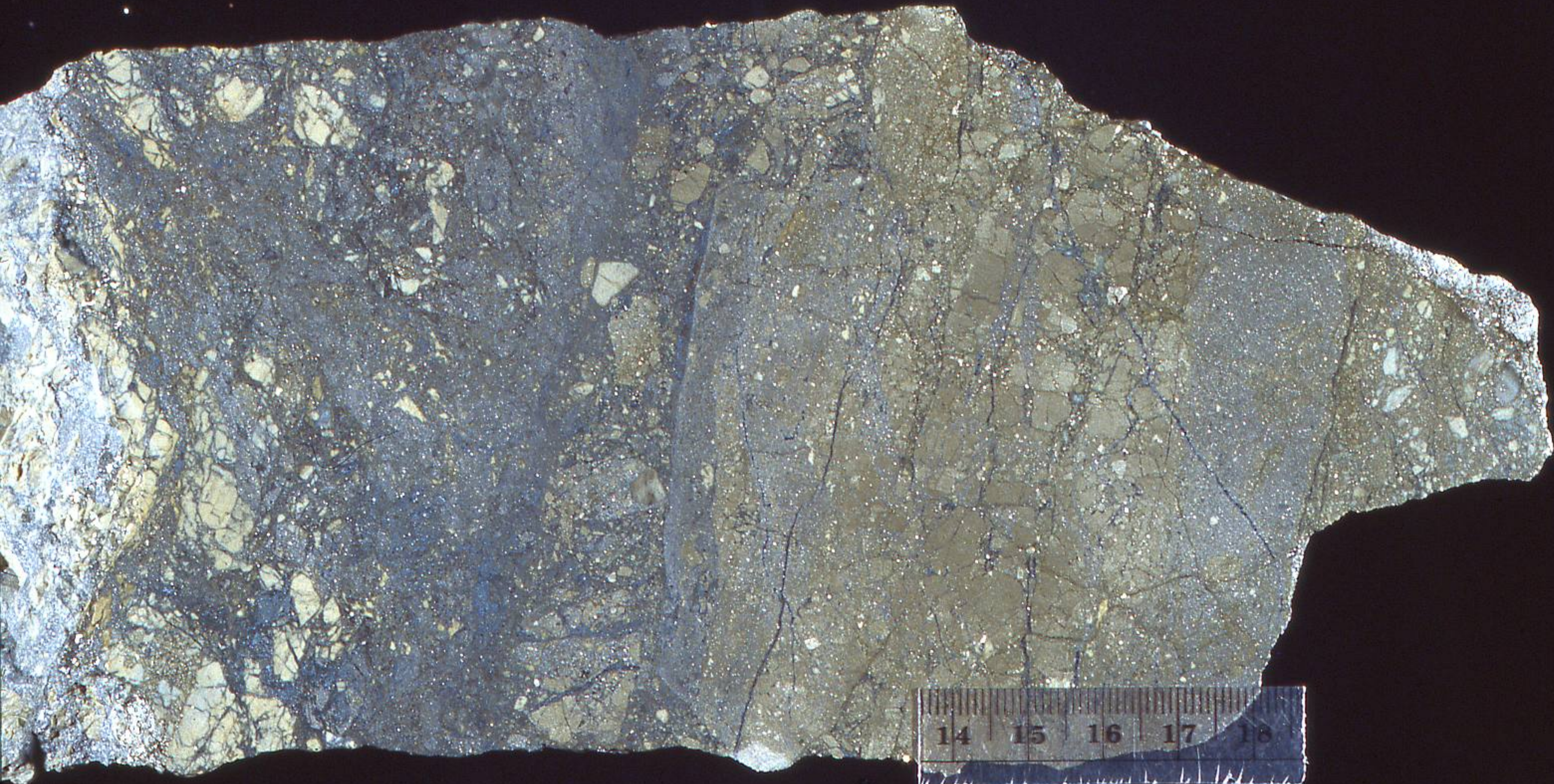
- B BULKLEY INTRUSIONS - PORPHYRITIC QUARTZ MONZONITE AND GRANODIORITE.

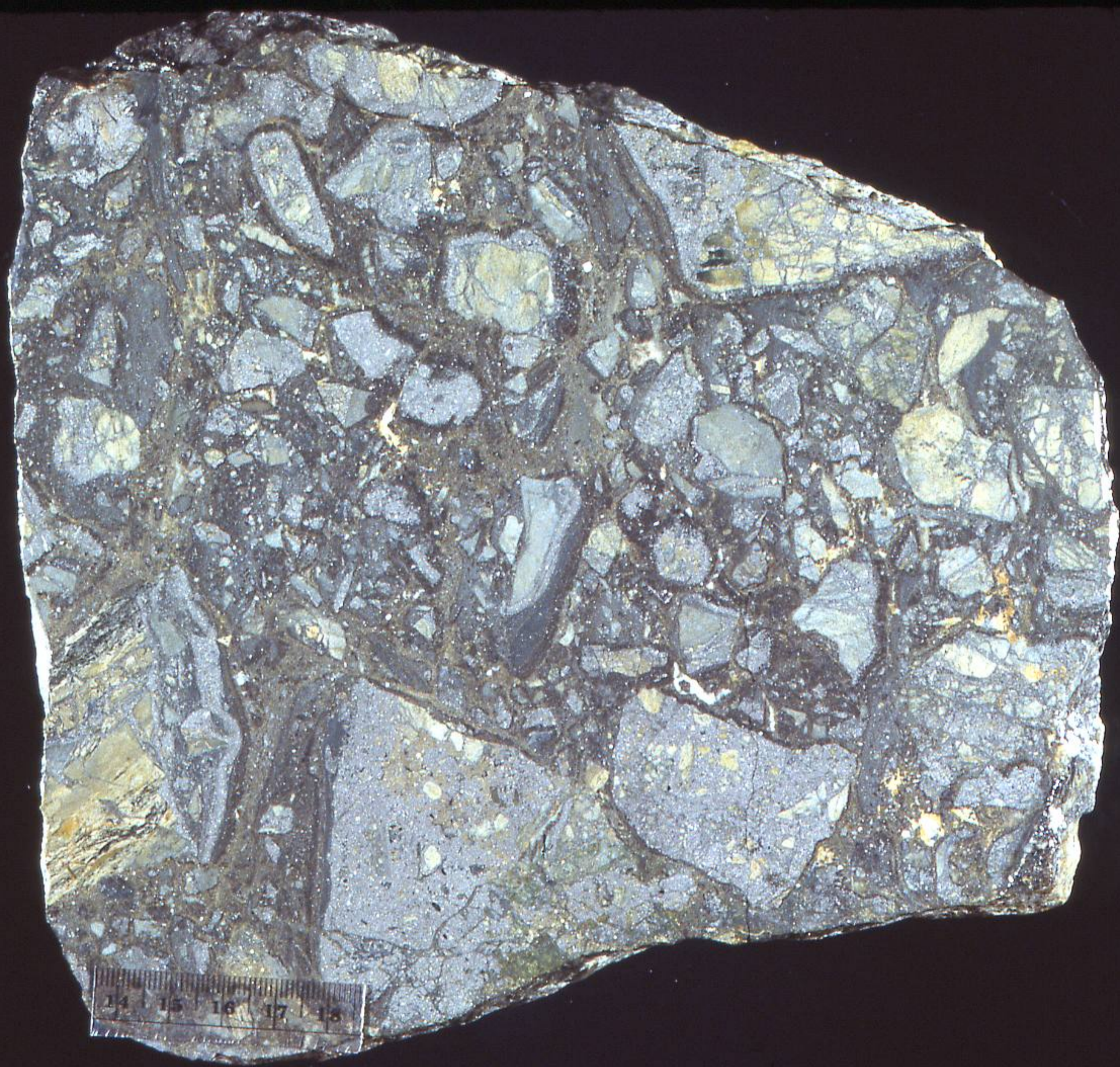
JURASSIC

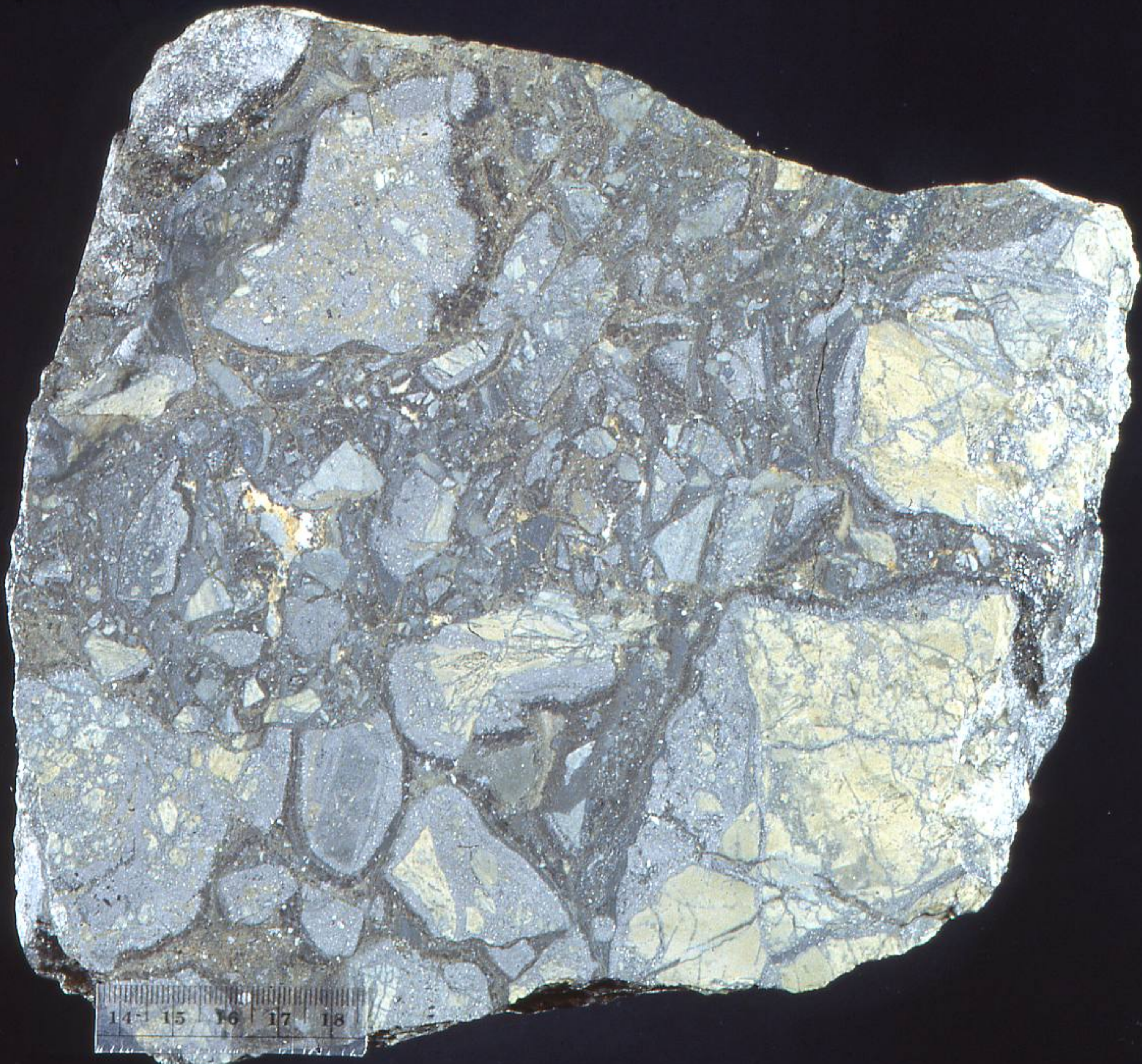
UPPER JURASSIC

- A FRANCOIS LAKE INTRUSIONS - PORPHYRITIC QUARTZ MONZONITE, GRANODIORITE AND QUARTZ DIORITE.









14 15 16 17 18



