

Prepared in collaboration with:
 Russian Academy of Sciences
 Geological Committee of Russia
 Alaska Division of Geological and Geophysical Surveys

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LEGEND

TECTONIC ENVIRONMENTS
 (For terranes with varying geologic history, color indicates dominant tectonic environment)

- Craton
- Craton margin
- Cratonal terranes
- Passive continental margin terranes
- Metamorphosed continental margin terranes
- Continental margin arc terranes
- Island arc terranes
- Oceanic crust, sea mount, ophiolite, and convergent margin terranes
- Oceanic crust, sea mount, and ophiolite terranes of unknown mode of emplacement
- Accretionary wedge and subduction zone terranes—A. Predominantly turbidites with lesser or no oceanic rocks
- Accretionary wedge and subduction zone terranes—B. Predominantly oceanic rocks with generally lesser amounts turbidites (Note: includes subterrane composed predominantly of turbidites)
- Turbidite basin terranes
- Metamorphic terranes

POST-ACCRETIONARY CENOZOIC AND MESOZOIC SEDIMENTARY AND IGNEOUS OVERLAP ASSEMBLAGES
 (For overlap assemblages with a long age span, the color of the youngest major unit is shown)

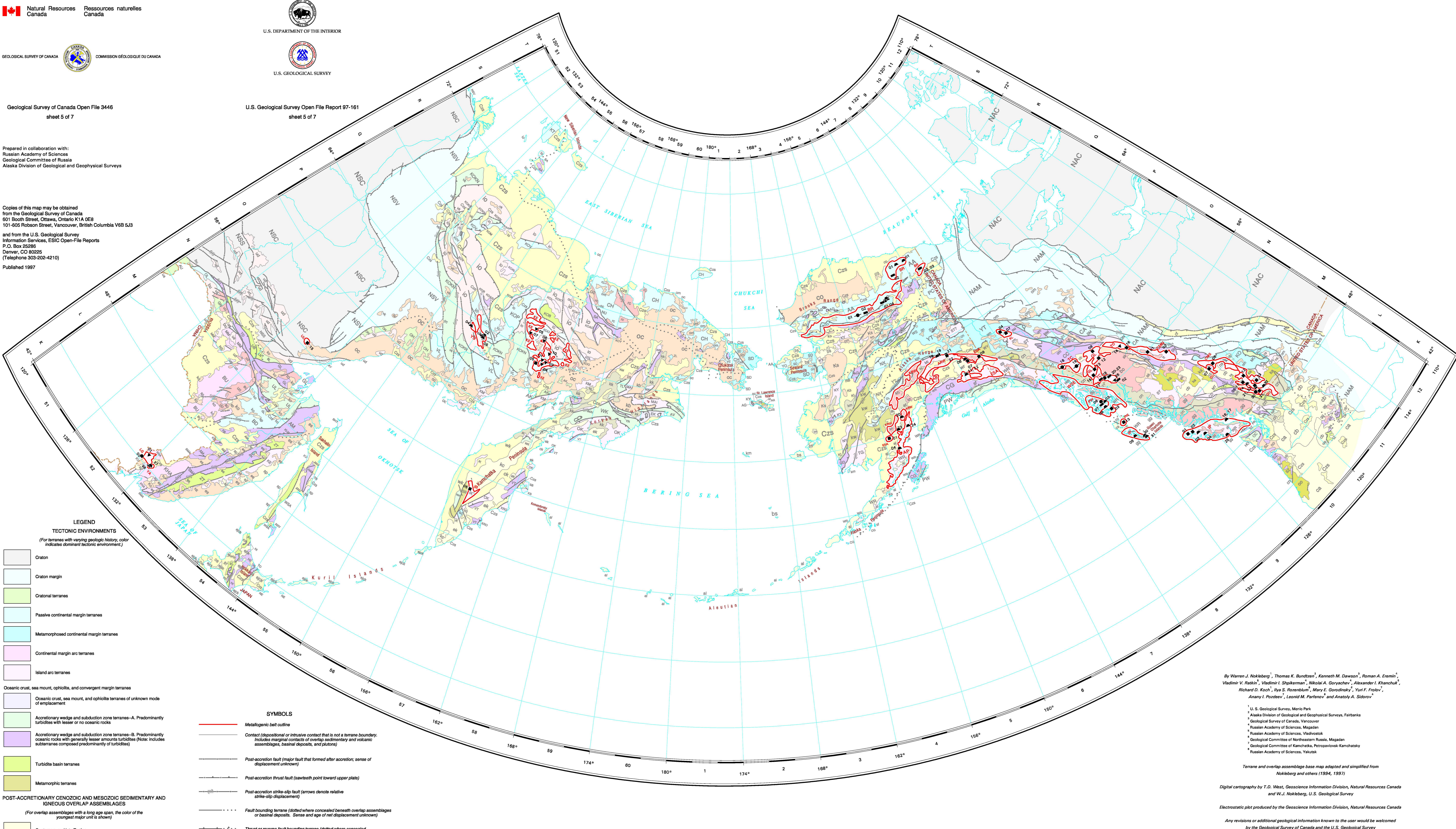
- Quaternary and Late Tertiary
- Cenozoic (Quaternary and Tertiary)
- Middle Tertiary
- Early Tertiary and Late Cretaceous
- Cretaceous
- Early Cretaceous and Late Jurassic
- Jurassic

SYMBOLS

- Metalogenic belt outline
- Contact (dispositional or intrusive contact that is not a terrane boundary; includes marginal contacts of overlap, accretionary and volcanic assemblages, basal deposits, and plutons)
- Post-accretion fault (major fault that formed after accretion; sense of displacement unknown)
- Post-accretion thrust fault (sawtooths point toward upper plate)
- Post-accretion strike-slip fault (arrows denote relative strike-slip displacement)
- Fault bounding terrane (dotted where concealed beneath overlap assemblages or basinal deposits. Sense and age of net displacement unknown)
- Thrust or reverse fault bounding terrane (dotted where concealed. Sawtooth point toward upper plate)
- Strike-slip fault bounding terrane (dotted where concealed. Arrows denote relative displacement)

DEPOSIT MODELS

- DEPOSITS RELATED TO SUBARIAL EXTRUSIVE ROCKS
- DEPOSITS RELATED TO CALC-ALKALINE AND ALKALINE INTRUSIONS
 - VEINS AND REPLACEMENTS
 - SKARNIS AND GREISENS
 - PORPHYRY AND GRANITIC PLUTON-HOSTED DEPOSITS
- DEPOSITS RELATED TO MAFIC AND ULTRAMAFIC ROCKS
- DEPOSITS RELATED TO REGIONALLY METAMORPHOSSED ROCKS



Pre-accretionary metallogenic belts: felsic-magmatism-related deposits

MINERAL DEPOSIT AND METALLOGENIC BELT MAPS OF THE RUSSIAN FAR EAST, ALASKA, AND THE CANADIAN CORDILLERA

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 SHEET 5 OF 7

Scale 1:10 000 000
 Center of projection: 20N, 180W
 Lambert Azimuthal Equal Area Projection
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Terrane and overlap assemblage base map adapted and simplified from Nokleberg and others (1994, 1997)

Digital cartography by T.D. West, Geoscience Information Division, Natural Resources Canada and W.J. Nokleberg, U.S. Geological Survey

Electrostatic plot produced by the Geoscience Information Division, Natural Resources Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada and the U.S. Geological Survey

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NUMBER	DEPOSIT NAME	DEPOSIT MODEL	MAJOR METALS
AP	Alaska Peninsula Metallogenic Belt of Granitic Magmatism Deposits (Jurassic), Alaska Peninsula		
005	Crevise Creek (McNeill)	Cu-Au skarn	Au, Cu
P05	Glacier Fork	Cu-Zn skarn	Cu, Zn
20	Kamuk Creek (Kontreshbunai)	Cu-Fa skarn	Cu, Fe
23	Magnetite Island (Tuxedri Bay)	Fe skarn	Fe, Ti
24			
ARW	Alaska Range-Wrangell Mountains Metallogenic Belt of Granitic Magmatism Deposits (Pennsylvanian and Permian), Central and Eastern-Southern Alaska		
P06	Rainy Creek District	Cu-Ag skarn	Cu, Ag, Au
18	Rainbow Mountain	Porphyry Cu	Cu, Ag
21	State Creek	Porphyry Cu/Fe	Cu, Ag, Au
22	Chishtiata District	Porphyry Cu and polymetallic vein	Cu, Fe, Ag, Au
BR	Brooks Range Metallogenic Belt of Granitic Magmatism Deposits (Devonian), Northern Alaska		
Q05	Mount Iglopaq and Arngetch Peaks	Polymetallic vein, Au quartz vein, Si skarn, Cu-Pb-Zn skarn	Cu, Pb, Zn, Ag, Au, Sn, W, As
02	Ann, (Ernie Lake)	Polymetallic vein (metamorphosed)	Pb, Zn, Ag
Q06			
01	Jim-Montana	Cu-Zn skarn	Cu, Zn, Ag, Pb
02	Sulzback Mountain	Si skarn	Au, Sn, Mo
03	Victor, Vainas, Evelyn Lee, and Ebo	Porphyry Cu and Cu skarn	Cu, Zn, Ag, Mo
04	George Creek	Porphyry Cu-Mo	Cu, Mo
H06			
01	Essauk Glacier	Pb-Zn skarn and fluorite vein	Pb, Zn, Sn, Cu, W
02	Porsuine Lake	Polymetallic vein(?)	Cu, Zn, Ag, F
R07			
01	Romanov Mountains	Polymetallic vein, Pb-Zn and possibly Si skarn	Pb, Cu, Zn, Mo, Sn, Ag, F
02	Beer Mountain	Porphyry Mo	Mo, W
03	Galena Creek	Polymetallic vein	Cu, Zn, Pb, Ag
CMN	Copper Mountain (North) Metallogenic Belt of Porphyry Cu-Au Deposits (Jurassic), Northern British Columbia		
N10	Lorraine (Duckling Creek)	Porphyry Cu-Mo	Cu
02	Mount Milligan	Porphyry Cu-Au	Cu, Au
Q08			
16	Kemess (Kemess N., Kemess S.)	Porphyry Cu-Au	Cu, Au
CMS	Copper Mountain (South) Metallogenic Belt of Porphyry Cu-Au Deposits (Jurassic), Southern British Columbia		
M10	Iron Mask Area (Afton, Ajax)	Porphyry Cu-Au	Cu
30	Lodestone Mountain Area	Zoned mafic-ultramafic Fe-V	Fe, V
31	Copper Mountain (Highgate, etc.)	Porphyry Cu-Au	Cu
N10			
08	Mt. Polley (Cariboo Belt)	Porphyry Cu-Au	Cu, Au
ESA	Eastern-Southern Alaska Metallogenic Belt of Granitic Magmatism Deposits (Late Jurassic and Early Cretaceous), Eastern-Southern Alaska		
Q05			
01	Pebble Copper	Porphyry Au-Cu	Au, Cu, Mo
P07			
06	Nebena, Rambler	Fe-Au skarn	Au
07	Orange Hill, Bond Creek	Porphyry Cu-Mo and Cu-Au skarn	Cu, Mo, Au
08	Blufftop, Kookali, Carl Creek	Porphyry Cu	Cu, Mo, Ag
11	London and Ceon	Porphyry Cu-Mo	Cu, Mo, Ag
12	Mesa (Berg Creek)	Cu skarn	Au, Cu, Ag
GL	Galena Creek Metallogenic Belt of Porphyry Cu-Au Deposits (Late Triassic and Early Jurassic), Northern British Columbia		
Q09			
12	Sink Lake Area (Luna, Siskine)	Porphyry Cu	Cu
12	Red Cree (Money)	Porphyry Cu	Cu, Au, (Zn, Pb, Mo)
18	Galena Creek (Siskine Copper)	Porphyry Cu-Au	Cu, Au
GU	Gulichen Metallogenic Belt of Porphyry Cu-Mo-Au and Au Skarn Deposits (Late Triassic and Early Jurassic), Southern British Columbia		
M10	Bethlehem-JA	Porphyry Cu-Mo	Cu, Mo
08	Valley Copper	Porphyry Cu-Mo	Cu, Mo
10	Lorne	Cu-Mo	Cu, Mo
11	Highmont (Snowed Mountain)	Porphyry Cu-Mo	Cu, Mo
14	Chapin	Cu skarn	Cu, Fe
22	North Fork (Crawley, Avel)	Porphyry Cu	Cu, Fe
22	Primer (North Zone)	Porphyry Cu	Cu, Fe
22	Primer (South Zone)	Porphyry Cu	Cu, Fe
32	Hedley Camp (Nickel Plate, Masoot, etc.)	Au skarn	Au, Ag
N10			
07	Sibirozar (Polynna, Granite Mt)	Porphyry Cu-Mo	Cu, Mo
IP	Island Porphyry Metallogenic Belt of Porphyry Cu-Mo; Cu Skarn, and Fe and Cu Skarn Deposits (Jurassic), Vancouver Island		
M09			
02	Red Digg	Porphyry Cu	Cu
02	Island Copper (Rupert Inlet)	Porphyry Cu-Mo	Cu, Mo, Au
04	Benara Area (Ginger, Coast Copper)	Cu skarn	Cu, Fe
04	Zabellou Iron (Ford)	Fe skarn	Fe
M10			
18	Taxada (Vananda, Marble Bay, etc.)	Cu-Au skarn	Cu, Au, Ag
17	Taxada Iron	Fe skarn	Fe
18	Kennedy Lake (Byron)	Fe skarn	Fe
N08			
05	Tau Sound (Westrob, Teau, Garnet)	Fe skarn	Fe, Cu
N08			
30	Burnaby Iron (Lib)	Fe skarn	Fe
31	Jedway (Magnat, Jesse)	Fe skarn	Fe
IR	Inneskiy Metallogenic Belt of Porphyry Cu Deposits (Late Jurassic), Southern Kamchatka Peninsula		
N57			
05	Kirgank	Porphyry Cu	Cu, Au
KE	Kedon Metallogenic Belt of Au-Ag Epithermal Vein, Porphyry Mo, Fe Skarn, and Associated Deposits (Middle Paleozoic), Central Part of Russian Northeast		
P57			
01	Griha	Au-Ag epithermal vein	Au, Ag
03	Kulaska	Au-Ag epithermal vein	Au, Ag
04	Volchka	Au-Ag epithermal vein	Au, Ag
05	Vochtenka	Porphyry Mo-Cu	Mo, Cu
Q57			
05	Zet	Au-Ag epithermal vein	Au, Ag
07	Shcha	Au-Ag epithermal vein	Au, Ag
08	Zhynovennos	Au-Ag epithermal vein	Au, Ag
10	Turmanenka	Porphyry Mo-Cu	Mo, Cu
KL	Kitassin Porphyry Metallogenic Belt of Porphyry Cu-Au-Ag Deposits (Early Jurassic), Southern Yukon Territory		
P08			
04	Minto Copper (delt)	Porphyry Cu-Au	Cu
07	Williams Creek	Porphyry Cu-Au	Cu
LG	Lacolin-Grodekovsk Metallogenic Belt of Porphyry Cu-Mo and Au-Ag Epithermal Vein Deposits (Permian), Southern Part of Russian Southeast		
L52			
01	Komsarovskoe (Voreb'eva plat)	Au-Ag epithermal vein	Au, Ag
02	Sakal	Porphyry Cu-Mo	Cu, Mo
PW	Prince of Wales Island Metallogenic Belt of Granitic-Magma-Related Deposits (Ordovician and Silurian), Southeastern Alaska		
N08			
02	Kassan Peninsula (Mount Andrew)	Cu-Fe skarn	Cu, Fe
06	Balt Chuck	Zoned mafic-ultramafic Cu-Au-PGE	Cu, Pb, Pt, Au
07	Dawson	Polymetallic vein	Au
13	McLean Arm district	Porphyry Co-Mo	Co, Mo
TC	Texas Creek Metallogenic Belt of Porphyry Cu-Mo-Au and Au-Ag Polymetallic Vein Deposits (Late Triassic to Middle Jurassic), Northern British Columbia		
N09			
02	Red Mountain	Au-Ag polymetallic vein	Au, Ag
Q08			
18	Polaris-Taku (Whitewater)	Au quartz vein	Au, Ag, Cu, As, Sb
18	Muddy Lake (Golden Bear, Totem)	Au quartz vein	Au
Q09			
13	Schiff Creek (Lard Copper)	Porphyry Cu-Mo	Cu, Mo
17	Shig (Shat)	Au-Pb-Zn polymetallic vein	Au, Pb, Zn
18	Shig (Shat) Creek (E & L)	Au-Ag epithermal vein	Au, Ag
20	Sulphurets (Gold Zone)	Porphyry Cu-Au	Cu, Au
21	Son (Mesa Creek)	Cu-Au skarn	Cu, Au, Ag
22	Sironidiki (Sibirskaya)	Au-Ag polymetallic vein	Au, Ag
23	Shukpak Lake (West Zone, Shore Zone)	Au-Ag polymetallic vein	Au, Ag, Pb, Zn
26	Shukpak-Premier (Premier Gold)	Au-Ag polymetallic vein	Au, Ag, Pb, Zn
TO	Toodoggonne Metallogenic Belt of Au-Ag Epithermal Vein Deposits (Early Jurassic), Northern British Columbia		
Q09			
14	Toodoggonne District (Lawyers)	Au-Ag epithermal vein	Au, Ag
UL	Ulkan Metallogenic Belt of Felsic Plutonic REE Deposits (Early and Middle Proterozoic), Northwestern Part of Russian Southeast		
Q53			
15	Ulkanok	Felsic plutonic REE	REE, Ba, Zr
WSE	Western-Southeastern Alaska Metallogenic Belt of Granitic-Magma-Related Deposits (Late Jurassic and Early Cretaceous), Southeastern Alaska		
N08			
03	Bakan Mountain (Ross Adams)	Felsic plutonic U-REE	U, Th, Ba, Nb, Pt, REE
08		Cu-Au skarn	Fe, Ag, Au, Cu, Mo
YA	Yasachnaya Metallogenic Belt of Fluorite and Sn Greisen Deposits (Late Cambrian), Southern Part of Russian Southeast		
L53			
36	Vosnesenka II	Fluorite greisen	Fluorite
37	Yasachnaya	Sn greisen	Sn
YS	Yasachnaya River Metallogenic Belt of Pb-Zn Skarn, Porphyry Cu, and Cu-Ag Vein Deposits (Late Jurassic), Western Part of Russian Northeast		
Q09			
04	Terrassno	Pb-Zn skarn	Pb, Zn
P56			
02	Destronos	Porphyry Cu	Cu, Ag, Bi
04	Kunayev	Pb-Zn-Cu-Ag skarn	Pb, Zn, Cu, Ag
05	Chernikovo	Fe-Cu, Pb, Zn skarn	Fe