SUMMARY OF METALLOGENIC BELTS FOR RUSSIAN FAR EAST, ALASKA, AND CANADIAN CORDILLERA

TECTONIC ENVIRONMENTS FOR METALLOGENIC BELTS

- SUBDUCTION - AXIAL ARC, FOREARC, AND BACKARC
- COLLISIONAL - ANATECTIC IGNEOUS ARC & REGIONAL METAMORPHISM
- POST-COLLISION - EXTENSIONAL METAMORPHISM
- RIFTING - SEA FLOOR, BACK-ARC, CONTINENTAL
- TRANSFORM MARGIN - IGNEOUS ARC AND REGIONAL METAMORPHISM

LATE DEVONIAN - 387 TO TO 360 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AKY	Alaska Range & Yukon-Tanana	Kuroko massive sulfide	Continental-margin arc
AT	Arctic	Kuroko massive sulfide	Continental-margin arc
BR	Brooks Range	Porphyry Cu	Continental-margin arc
FR	Frances Lake	Kuroko massive sulfide	Continental-margin arc
FL	Finlayson Lake	SEDEX	Rifted continental margin
GA	Gataga	SEDEX	Rifted continental margin
KE	Kedon	Au-Ag epithermal vein	Continental-margin arc
KR	Khama River	Carbonatite-related REE	Rifted continental margin
KS	Kootenay-Shuswap.	Kuroko massive sulfide	Rifted continental margin
MP	Macmillan Pass	SEDEX	Rifted continental margin
MS	Mount Sicker	Kuroko massive sulfide	Rifted continental margin
NCO	N. Cordillera	SE Missouri Zn-Pb	Rifted continental margin
SD	Sette-Daban	SE Missouri Pb-Zn	Rifted continental margin
SEL	Selennyakh River	SE Missouri Pb-Zn	Rifted continental margin
SRM	S. Rocky Mountain	Chem-sed gypsum	Rifted continental margin
TR	Tracy	Kuroko massive sulfide	Rifted continental margin
URS	Urultun & Sudar Rivers	SE Missouri Pb-Zn	Rifted continental margin

MISSISSIPPIAN - 360 TO 320 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
FL	Finlayson Lake	SEDEX	Rifted continental margin
GA	Gataga	SEDEX	Rifted continental margin
KE	Kedon	Au-Ag epithermal vein	Continental-margin arc
MP	Macmillan Pass	SEDEX	Rifted continental margin
NBR	NW Brooks Range	SEDEX	Continental-margin arc?
NCO	Northern Cordillera	SE Missouri Zn-Pb	Rifted continental margin
SD	Sette-Daban	SE Missouri Pb-Zn	Rifted continental margin
SEL	Selennyakh River	SE Missouri Pb-Zn	Rifted continental margin
URS	Urultun & Sudar Rivers	SE Missouri Pb-Zn	Rifted continental margin

PENNSYLVANIAN - 320 TO 286 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AC	Aluchin	Podiform Cr	Back-arc rifting?
ARW	Alaska Range- Wrangell Mountains	Cu skarn, porphyry Cu	Continental-margin arc
FM	Fortymile	Serpentinite-hosted asbestos	Sea-floor spreading
UB	Ust-Belaya	Podiform Cr	Sea-floor spreading

LATE TRIASSIC - 230 TO 208 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AX	Alexander	Cyprus massive sulfide	Back-arc rifting
CMN	Copper Mountain North.	Porphyry Cu	Island arc
CMS	Copper Mountain South	Porphyry Cu-Au	Island arc
EAR	Eastern Alaska R.	Gabbroic Ni-Cu	Back-arc rifting?
GL	Galore	Porphyry Cu	Island arc
GU	Guichon	Porphyry Cu-Mo-Au	Island arc
KOD	Kodiak Island & Border Ranges	Podiform Cr	Island arc
TC	Texas Creek	Porphyry Cu-Mo-Au	Island arc

EARLY JURASSIC - 208 TO 193 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AP	Alaska Peninsula	Cu-Fe skarn	Island arc
CM	Coast Mountains	Kuroko massive sulfide	Island arc
CMS	Copper Mountain North	Porphyry Cu	Island arc
CMS	Copper Mountain South	Porphyry Cu-Au	Island arc
GL	Galore	Porphyry Cu	Island arc
GU	Guichon	Porphyry Cu-Mo-Au	Island arc
IP	Island Porphyry	Porphyry Cu-Mo	Island arc
KL	Klotassin	Porphyry Cu-Au-Ag	Island arc
TC	Texas Creek	Porphyry Cu-Mo-Au	Island arc
TM	Talkeetna Mountains	Kuroko massive sulfide	Island arc
TO	Toodoggone	Au-Ag epithermal vein	Island arc

MIDDLE JURASSIC - 193 TO 163 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AP	Alaska Peninsula	Cu-Fe skarn	Island arc
CM	Coast Mountains	Kuroko massive sulfide	Island arc
CMS	Copper Mountain North	Porphyry Cu	Island arc
CMS	Copper Mountain South	Porphyry Cu-Au	Island arc
GL	Galore	Porphyry Cu	Island arc
GU	Guichon	Porphyry Cu-Mo-Au	Island arc
IP	Island Porphyry	Porphyry Cu-Mo	Island arc
KL	Klotassin	Porphyry Cu-Au-Ag	Island arc
TC	Texas Creek	Porphyry Cu-Mo-Au	Island arc
TM	Talkeetna Mountains	Kuroko massive sulfide	Island arc
TO	Toodoggone	Au-Ag epithermal vein	Island arc

LATE JURASSIC - 163 TO 144 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AR	Ariadny	Zoned mafic-ultramafic Ti	Transform margin
CAR	Chersky-Argatass	Kuroko massive sulfide	Island arc
CB	Cariboo	Au quartz vein	Collisional
ESA	Eastern Southern Alaska	Porphyry Cu	Island arc
IP	Island Porphyry	Porphyry Cu-Mo	Island arc
KB	Kobuk	Podiform Cr	Island arc
KL	Klukwan-Duke	Zone-mafic-ultramafic-Cr	Island arc
KO	Kondyor	Zoned mafic-ultramafic PGE	Transform margin
KUY	Kuyul	Podiform Cr-PGE	Island arc
MA	Mainits	Kuroko massive sulfide	Island arc
OL	Oloy	Porphyry Cu-Mo	Island arc
RL	Rossland	Au-Ag polymetallic vein	Collisional
ST	Stanovoy	Granitoid-related Au	Anatectic plutonism
SWA	Southwestern Alaska	Zoned mafic-ultramafic PGE	Island arc
SVN	Svyatoy-Nos	Au-Ag vein	Island arc
TAM	Tamvatney-Mainits	Podiform Cr	Island arc
YR	Yukon River	Podiform Cr	Island arc
YS	Yasachnaya River	Pb-Zn skarn, porphyry Cu	Island arc

EARLY CRETACEOUS - 144 TO 120 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AY	Allakh-Yun	Au quartz vein	Anatectic plutonism
CB	Cariboo	Au quartz vein	Collisional
DP	Darpir	Sn skarn, Sn greisen	Anatectic plutonism
KU	Kular	Au-quartz vein	Anatectic plutonism
MA	Mainits	Kuroko massive sulfide	Island arc
OL	Oloy	Porphyry Cu-Mo	Island arc
SK	Selemdzha-Kerbi	Au quartz vein	Anatectic plutonism
ST	Stanovoy	Granitoid-related Au	Anatectic plutonism
TO	Tompon	Cu, W, Sn skarn	Anatectic plutonism
SH	Shamanikha	Au quartz vein	Anatectic plutonism
TAM	Tamvatney-Mainits	Podiform Cr	Island arc
VK	Verkhoyansk	Au quartz vein	Anatectic plutonism
WSE	Western Southern Alaska	Porphyry Mo	Island arc
YA	Yana-Kolyma	Au quartz vein	Anatectic plutonism
YP	Yana-Polousnen	Granitoid-related Au	Anatectic plutonism

LATE EARLY CRETACEOUS - 119 TO 100 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
BA	Bayonne	Porphyry Mo	Anatectic plutonism
BZ, KH	Badzhal-Ezop-Khingan	Sn greisen, Sn vein	Continental-margin arc
CA	Cassiar	Porphyry Mo	Anatectic plutonism
CD	Chokurdak	Sn vein, Sn greisen	Continental-margin arc
KU	Kular	Au-quartz vein	Anatectic plutonism
NO	Nome	Au quartz vein	Extensional
SA	Samarka	W skarn	Anatectic plutonism
SW	Selwyn	W-Cu skarn	Anatectic plutonism
TS	Tombstone	Ag polymetallic vein	Anatectic plutonism
WH	White Horse	Cu-Fe skarn	Anatectic plutonism
WSE	Western South Alaska.	Porphyry Mo	Island arc

EARLY LATE CRETACEOUS - 100 TO 84 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AT	Adycha-Taryn	Au-Ag epithermal vein	Continental-margin arc
BA	Bayonne	Porphyry Mo	Anatectic plutonism
BZ, KH	Badzhal-Ezop-Khingan	Sn greisen, Sn vein	Continental-margin arc
CA	Cassiar	Porphyry Mo	Anatectic plutonism
CH	Chukotka	Au quartz vein	Collisional
CN	Chaun	Sn polymetallic vein	Continental-margin arc
DE	Dodgo-Erikit	Au-Ag epithermal vein	Continental-margin arc
ECA	East-Central Alaska (older part)	Granitoid-related Au	Anatectic plutonism
KM	Kema	Au-Ag epithermal vein	Continental-margin arc
KH	Koryak Highlands	Zoned mafic-ultramafic PGE	Island arc
KH	Korkodon-Nayakan	Porphyry Mo	Continental-margin arc
KY	Koni-Tablon	Porphyry Cu	Continental-margin arc
LA	Lower Amur	Au-Ag epithermal vein	Continental-margin arc
LZ	Luzhinsky	Sn polymetallic vein	Continental-margin arc

EARLY LATE CRETACEOUS - 100 TO 84 Ma (continued)

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
OH	Okhotsk	Au-Ag epithermal vein	Continental-margin arc
OM	Omsukchan	Au-Ag epithermal vein	Continental-margin arc
SG	Sergeevka	Granitoid-related Au	Continental-margin arc
SW	Selwyn	W-Cu skarn	Anatectic plutonism
TK	Taukha	B Skarn, Pb-Zn skarn	Continental-margin arc
VV	Vostochno-Verkhoyansk.	Ag polymetallic vein	Continental-margin arc
VK	Verkhne-Kolyma	Sn-Ag polymetallic vein	Continental-margin arc
VT	Vatyn	Volcanogenic Mn-Fe	Island arc
YT	Yukon-Tanana	Au-quartz vein	Extensional
WH	White Horse	Cu-Fe skarn	Anatectic plutonism
WR	Wrangell Mountains	Cu-Ag quartz vein	Collisional

LATE CRETACEOUS AND EARLY TERTIARY - 84 TO 52 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
AB	Anuyi-Bernovsky	Au-Ag epithermal vein	Continental-margin arc
AT	Adycha-Taryn	Au-Ag epithermal vein	Continental-margin arc
BN	Baranof	Au quartz vein	Extensional
BK	Bulkey Lake	Porphyry Cu-Mo	Continental-margin arc
CF	Catface	Porphyry Cu-Mo	Continental-margin arc
CH	Chukotka	Sediment-hosted Hg	Continental-margin arc
CM	Chugach Mountains	Au quartz vein	Extensional
CN	Chaun	Sn polymetallic vein	Continental-margin arc
CSE	Central SE Alaska	Porphyry Mo	Continental-margin arc
ECA	East-Central Ak (younger part)	Sn greisen, Sn vein	Continental-margin arc
FLB	Fish Lake-Bralorne	Au-Ag polymetallic vein	Continental-margin arc
GA	Gambier	Porphyry Cu-Mo	Continental-margin arc
JU	Juneau	Au quartz vein	Extensional
KM	Kema	Au-Ag epithermal vein	Continental-margin arc
KN	Korkodon-Nayakan	Porphyry Mo	Continental-margin arc
KH	Koryak Highlands	Zoned mafic-ultramaf PGE	Island arc
LA	Lower Amur	Au-Ag epithermal vein	Continental-margin arc
LZ	Luzhinsky	Sn polymetallic vein	Continental-margin arc
LA	Lower Amur	Au-Ag epithermal vein	Continental-margin arc

LATE CRETACEOUS AND EARLY TERTIARY - 82 TO 52 Ma (continued)

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
LZ	Luzhinsky	Sn polymetallic vein	Continental-margin arc
NS	Nelson	Ag polymetallic vein	Continental-margin arc
NWK	NW Koyukuk Basin	Felsic plutonic U	Continental-margin arc
OH	Okhotsk	Au-Ag epithermal vein	Continental-margin arc
OM	Omsukchan	Au-Ag epithermal vein	Continental-margin arc
PW	Prince William	Besshi massive sulfide	Sea-floor spreading
SA	Southern Alaska	Porphyry Cu	Continental-margin arc
SG	Sergeevka	Granitoid-related Au	Continental-margin arc
SK	Skeena	Same	Continental-margin arc
SL	Surprise Lake	Porphyry Mo-Cu	Continental-margin arc
SP	Seward Peninsula	Sn skarn, Sn greisen	Continental-margin arc
SWK	SW Kuskokwim Mt.	Sn-Cu-Ag greisen	Continental-margin arc
TK	Taukha	B Skarn, Pb-Zn skarn	Continental-margin arc
VI	Verkhoyansk-Indigirka	Sb-Au vein	Continental-margin arc
VK	Verkhne-Kolyma	Sn-Ag polymetallic vein	Continental-margin arc
VT	Vatyn	Volcanogenic Mn-Fe	Island arc
VV	Vostochno-Verkhoyansk	Ag polymetallic vein	Continental-margin arc
VY	Verkhne-Yudomsky	Sn & Ag polymetallic vein	Continental-margin arc
WCA	West-Central Ak	Porphyry Cu	Continental-margin arc
YK	Yakobi	Gabbroic Ni-Cu	Rifting

EARLY TERTIARY - 52 TO 23 Ma

BELT	NAME	MAIN DEPOSIT TYPE	TECTONIC ENVIRONMENT
CKY	Central Koryak	Sn polymetallic vein	Transform margin
OC	Owl Creek	Porphyry Cu-Mo	Continental-margin arc

MIDDLE TERTIARY - 20 TO 10 Ma

AP	Alaska Peninsula	Au-Ag epithermal vein	Continental-margin arc
CK	Central Kamchatka	Au-Ag epithermal vein	Continental-margin arc
OC	Owl Creek	Porphyry Cu-Mo	Continental-margin arc

LATE TERTIARY AND QUATERNARY 4 TO 0 Ma

AP	Alaska Peninsula	Au-Ag epithermal vein	Continental-margin arc
CK	Central Kamchatka	Au-Ag epithermal vein	Continental-margin arc
EK	Central Kamchatka	Au-Ag epithermal vein	Continental-margin arc
KU	Kuril	Au-Ag epithermal vein	Continental-margin arc
OC	Owl Creek	Porphyry Cu-Mo	Continental-margin arc
OT	Olyutor	Au-Ag epithermal vein	Continental-margin arc