

Geologic Units in the Mount Rainier 1:100,000 Quadrangle (See explanatory note at bottom of spreadsheet)

Old Symbol	New Symbol	Age	Lithology	Named Unit
---	wtr	-----	water	---
af	Qf	Holocene	artificial fill, including modified land	---
g	ice	Holocene	ice	---
Jid	Jiq(i)	Jurassic	quartz diorite	Indian Creek, complex of
Jif	Jog(i)	Jurassic	orthogneiss	Indian Creek, complex of
KJr	KJm(r)	Cretaceous-Jurassic	marine sedimentary rocks	Russell Ranch Formation, clastic subunit
KJrc	KJmct(r)	Cretaceous-Jurassic	chert-rich marine sedimentary rocks	Russell Ranch Formation, chert-tuff subunit
KJrg	KJmv(r)	Cretaceous-Jurassic	metavolcanic rocks	Russell Ranch Formation
pTgr	KJvb(r)	Cretaceous-Jurassic	basalt flows	Russell Ranch Formation
pTvr	pTvr(r)	pre-Tertiary	rhyolite flows	Russell Ranch Formation
Qaf	Qaf	Holocene	alluvial fan deposits	---
Qal	Qa	Holocene	alluvium	---
Qdb	Qad(b)	Holocene	alpine glacial drift, Fraser-age	Burroughs Mountain Drift
Qde	Qad(e)	Pleistocene	alpine glacial drift, Fraser-age	Evans Creek Drift
Qdet	Qat(e)	Pleistocene	alpine glacial till, Fraser-age	Evans Creek Drift, till deposits
Qdg	Qad(g)	Holocene	alpine glacial drift, Fraser-age	Garda Drift
Qdh	Qap(h)	Pleistocene	alpine glacial drift, pre-Fraser	Hayden Creek Drift
Qdht	Qapt(h)	Pleistocene	alpine glacial till, pre-Fraser	Hayden Creek Drift, till deposits of
Qdm	Qad(mn)	Pleistocene	alpine glacial drift, Fraser-age	McNeely Drift
Qdum	Qap	Pleistocene	alpine glacial drift, pre-Fraser	---
Qia	Qian(os)	Pleistocene	intrusive andesite	Old Snowy Mountain, feeders for flows of (not described in text)
Qimr	Qian(mr)	Pleistocene	intrusive andesite	Mount Rainier, plugs and dikes of
Qls	Qls	Holocene	mass-wasting deposits, mostly landslides	---
Qme	Qvl(e)	Holocene	lahars	Electron Mudflow
Qmg	Qvl(g)	Holocene	lahars	Greenwater, lahar of
Qmo	Qvl(o)	Holocene	lahars	Osceola Mudflow
Qmp	Qvl(p)	Holocene	lahars	Paradise, debris flow of
Qmr	Qvl(r)	Holocene	lahars	Round Pass mudflow
Qmu	Qvl	Holocene	lahars	---
Qta	Qta	Holocene	talus deposits	---
QTbf	QPLva(bf)	Pleistocene-Pliocene	andesite flows	Bee Flat, andesite of
QThm	QPLvb(hm)	Pleistocene-Pliocene	basalt flows	Hogback Mountain, mafic rocks of
QTia	QPLian	Pleistocene-Pliocene	intrusive andesite	---
Qtr	Qt	Pleistocene	terraced deposits	---
QTsy	QPLvd(sy)	Pleistocene-Pliocene	dacite flows	Snyder Mountain, dacite of
QTva	QPLva	Pleistocene-Pliocene	andesite flows	---
QTvd	QPLvd	Pleistocene-Pliocene	dacite flows	---
QTvg	QPLva(g)	Pleistocene-Pliocene	andesite flows	Goat Rocks, andesite of
Qva	Qva	Pleistocene	andesite flows	---
Qvb	Qvb	Quaternary	basalt flows	---
Qvba	Qvba	Quaternary	basaltic andesite flows	---
Qvcf	Qvd(cf)	Pleistocene	dacite flows	Clear Fork, dacite of
Qvdl	Qva(dl)	Pleistocene	andesite flows	Deer Lake Mountain, andesite of
Qvdp	Qva(dp)	Pleistocene	andesite flows	Deep Creek, andesite of
Qvhm	Qvb(hm)	Pleistocene	basalt flows	Hogback Mountain, mafic rocks of
Qvj	Qva(jl)	Pleistocene	andesite flows	Jess Lake complex, andesite of the
Qvkl	Qvb(kl)	Pleistocene	basalt flows	Kincaid Lake, basalt of
Qvlv	Qvb(lv)	Pleistocene	basalt flows	Lava Creek, basalt of
Qvmo	Qva(mo)	Pleistocene	andesite flows	Mt. Rainier, andesite of, Observation & Echo Rocks andesites
Qvmr	Qva(mr)	Pleistocene	andesite flows	Mount Rainier, andesite of
Qvos	Qva(os)	Pleistocene	andesite flows	Old Snowy Mountain, andesite of
Qvpe	Qva(pl)	Pleistocene	andesite flows	Pear Lake, andesite of

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Qvro	Qva(rm)	Pleistocene	andesite flows	Round Mountain, andesite of
Qvrr	Qvb(rr)	Pleistocene	basalt flows	Rimrock Lake, basalts of
Qvru	Qva(ru)	Pleistocene	andesite flows	Russell Ridge, andesite of
Qvsp	Qvd(sp)	Pleistocene	dacite flows	Spiral Butte, dacite of
Qvti	Qva(ti)	Pleistocene	andesite flows	Tieton Andesite
Qvtm	Qvb(tm)	Pleistocene	basalt flows	Tumac Mountain, basalt of
Tbm	MOvt(bm)	Miocene-Oligocene	tuffs and tuff breccias	Burnt Mountain, tuff of
Tbr	MOvt(br)	Miocene-Oligocene	tuffs and tuff breccias	Bumping River, tuff of
Tbt	PLvb(b)	Pliocene	basalt flows	Bethel Ridge, olivine basalt of
Tcc	Ec(2cc)	Eocene	continental sedimentary deposits or rocks	Chambers Creek, beds of
Tdc	Evb(dc)	Eocene, middle	basalt flows	Discovery Creek basalt
Tdv	PLvr(d)	Pliocene	rhyolite flows	Devils Horns, rhyolite of
Tdw	PLvb(dw)	Pliocene	basalt flows	Devils Washbasin, basalt of
Tel	Mc(e)	Miocene, middle to upper	continental sedimentary deposits or rocks	Ellensburg Formation
Tfp	Mva(fp)	Miocene, lower	andesite flows	Fifes Peak Formation
Tgn(1)	Mv(gN1)	Miocene, middle	basalt flows (GrandeRondeBasalt,lower flows of norm.mag.pol.)	Grande Ronde Basalt, N1 (CRB)
Tgn(2)	Mv(gN2)	Miocene, middle	basalt flows (GrandeRondeBasalt,upper flows of norm.mag.pol.)	Grande Ronde Basalt, N2 (CRB)
Tgr	Mv(g)	Miocene, middle	basalt flows (Grande Ronde Basalt, undivided [CRB])	Grande Ronde Basalt, Columbia River Basalt Group
Tgr(2)	Mv(gR2)	Miocene, middle	basalt flows (GrandeRondeBasalt,upper flows of rev.mag.pol.)	Grande Ronde Basalt, R2 (CRB)
Tia	PLOian	Pliocene-Oligocene	intrusive andesite	---
Tib	MOib	Miocene-Oligocene	basic intrusive rocks	---
Tibl	Mia(bl)	Miocene	acidic intrusive rocks	Bumping Lake pluton
Tiblgd	Migd(bl)	Miocene	granodiorite	Bumping Lake pluton, associated stocks of
Tibx	Migb(bx)	Miocene, lower	gabbro	Box Canyon, intrusive diabase and basalt of
Ticr	Migd(cr)	Miocene	granodiorite	Carbon River stock
Ticw	Mir(cw)	Miocene, lower	intrusive rhyolite	Clear West, soda rhyolite of
Tid	PLMiad	Pliocene-Miocene	intrusive andesite and dacite	---
Tidi	MOid	Miocene-Oligocene	diorite	---
Tigd	Migd	Miocene	granodiorite	---
Tijl	Miq(jl)	Miocene, middle to upper	quartz diorite	Jug Lake, sills of
Timx	MOiv(mx)	Miocene-Oligocene	intrusive-volcanic complex	Mount Aix, volcanic complex of
Tins	Migd(n)	Miocene, lower to middle	granodiorite	Nisqually, granodiorite of
Tinsq	Miq(n)	Miocene, lower to middle	quartz diorite	Nisqually, quartz diorite of
Tir	Mir	Miocene	intrusive rhyolite	---
Tisx	Miv(sx)	Miocene, lower	intrusive-volcanic complex	Skyscraper Mountain complex
Tit	Mia(tr)	Miocene, lower	acidic intrusive rocks	Tatoosh pluton, rocks related to the
Titg	Miqm(t)	Miocene, lower to middle	quartz monzonite	Tatoosh pluton
Titgd	Migd(t)	Miocene, lower to middle	granodiorite	Tatoosh pluton
Titgm	Mia(t)	Miocene, lower to middle	acidic intrusive rocks	Tatoosh pluton
Titq	Miq(t)	Miocene, lower to middle	quartz diorite	Tatoosh pluton
Tiwr	Migd(wr)	Miocene, middle	granodiorite	White River pluton
Tiwrgr	Mig(wr)	Miocene, middle	granite	White River pluton
Tlo	Ec(2lo)	Eocene, middle to upper	continental sedimentary deposits or rocks	Lookout Creek, sandstone of
Tna	Ec(2na)	Eocene	continental sedimentary deposits or rocks	Naches Formation
Toh	Ovc(oh)	Oligocene	volcaniclastic deposits or rocks	Ohanapecosh Formation
Tohl	Ova(oh)	Oligocene	andesite flows	Ohanapecosh Formation
Tohr	Ovr(oh)	Oligocene, upper	rhyolite flows	Ohanapecosh Formation
Tpg	Ec(2pg)	Eocene	continental sedimentary deposits or rocks	Puget Group
Tpt	Mvt(p)	Miocene, lower	tuffs and tuff breccias	Palisades, welded tuff of the
Trt	MOvt(rt)	Miocene-Oligocene	tuffs and tuff breccias	Rattlesnake Creek, tuff of
Tsb	Evb(s)	Eocene, lower to middle	basalt flows	Summit Creek basalt
Tsnc	Ovc(scc)	Oligocene	volcaniclastic deposits or rocks	Spencer Creek, volcanic sandstone and conglomerate of

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Tsns	Ovc(sc)	Oligocene	volcaniclastic deposits or rocks	Spencer Creek, volcanic sediments of
Tsnt	Evt(sc)	Eocene, middle to upper	tuffs and tuff breccias	Spencer Creek, welded tuff of
Tsr	MOvt(sr)	Miocene-Oligocene	tuffs and tuff breccias	Stevens Ridge Formation south of Mount Rainier
Tsr	Mvt(sr)	Miocene	tuffs and tuff breccias	Stevens Ridge Formation north of Mount Rainier
Tss	Ec(2ss)	Eocene, middle to upper	continental sedimentary deposits or rocks	Summit Creek, sandstone of
Ttp	Evb(tp)	Eocene, middle	basalt flows	Tieton Pass, basalt of
Tva	Eva	Eocene	andesite flows	---
Tva(2)	Ova	Oligocene	andesite flows	---
Tva(2)?	MOva	Miocene-Oligocene	andesite flows	---
Tva(3)	Mva(1)	Miocene, lower	andesite flows	---
Tvb(3)	Mvb(1)	Miocene, lower	basalt flows	---
Tvba(3)	Mvba(1)	Miocene, lower	basaltic andesite flows	---
Tvc(0)	Evc	Eocene	volcaniclastic deposits or rocks	---
Tvc(1)	Ovc(1)	Oligocene, lower	volcaniclastic deposits or rocks	---
Tvc(2)	Ovc	Oligocene	volcaniclastic deposits or rocks	---
Tvc(2)?	MOvc	Miocene-Oligocene	volcaniclastic deposits or rocks	---
Tvc(3)	Mvc	Miocene	volcaniclastic deposits or rocks	---
Tvd(6)	PLvd	Pliocene	dacite flows	---
Tvr(1)	Ovr(1)	Oligocene, lower	rhyolite flows	---
Tvs(3)	Mc	Miocene	continental sedimentary deposits or rocks	---
Tvs(6)	PLc	Pliocene	continental sedimentary deposits or rocks	---
Tvt(2)?	MOvt	Miocene-Oligocene	tuffs and tuff breccias	---
Tvt(3)	Mvt	Miocene, lower	tuffs and tuff breccias	---
Tvt(6)	PLvt	Pliocene	tuffs and tuff breccias	---
Twc	Ovc(wc)	Oligocene	volcaniclastic deposits or rocks	Wildcat Creek, volcaniclastic rocks of
Twcb	Ovb(mc)	Oligocene	basalt flows	Milk Creek, olivine basalt of

Washington Division of Geology and Earth Resources Open File Report 87-16, Geologic map of the Mount Rainier Quadrangle, Washington, compiled by Henry W. Schasse, was released before the Division adopted a standard symbology for geologic units to be portrayed in 1:100,000, 1:250,000, and 1:500,000 geologic maps of Washington State. Therefore the geologic unit symbology on this map and in the accompanying text does not match that found on many later geologic maps that include the Mount Rainier 1:100,000 quadrangle. This makes it more difficult for the user to, for example, compare geologic unit descriptions between this map and others that have different symbols for the same unit or to compile a description for a geologic unit that occurs in more than one 1:100,000 quadrangle. This table is included to make it easier to relate the units on this map with units on later maps that use the standard symbology. The column headed "Old Symbol" lists the units on this map alphabetically. The column headed "New Symbol" lists the same units expressed in the standard symbology.