



Example of a trilinear diagram, showing water types represented in each area. Numbers are percentages. See text for further explanation.

The percentages of cations and anions for each sample are plotted on the accompanying trilinear, or Piper, diagrams. A separate diagram is shown for each geohydrologic unit identified in the study. Each sample is plotted in three places on the diagram. Each area of the diagram corresponds to a specific water type, as shown in the above example. The example also shows a magnesium-calcium-sodium/bicarbonate water type from well 18N/01W-21B06. The majority of analyses in each unit plot in the same general area and define a characteristic water type for the unit. Anomalous or unusual water types are noted by number on the trilinear diagram and are listed below.

Wells and springs with samples having anomalous or unusual water types

Geohydrologic unit	Number on diagram	Local well number	Water type	Dissolved solids concentration	Comments
Qal	1	25N/07E-04J01	Na/HCO ₃	193	Na= 54
Qvr	2	24N/08E-20R02	Na, Ca, Mg/HCO ₃	118	Na= 16
	3	25N/07E-26F01S	Ca, Mg, Na/HCO ₃ , NO ₃	89	NO ₃ = 6.3
	4	25N/07E-27D01	Na, Ca/HCO ₃	152	Na= 27
	5	25N/07E-34E02	Na, Ca, Mg/HCO ₃	92	Na= 12
	Qvt	6	25N/07E-01N01	Na/HCO ₃	234
Qva	7	24N/07E-18F03	Ca, Mg, Na/HCO ₃	91	NO ₃ = 3.8
	8	26N/07E-17C01	Na/HCO ₃	167	Na= 41
Q(A)f	9	26N/07E-19J02	Na/HCO ₃	203	Na= 54
	10	24N/07E-03P01	Ca, Na/Cl	329	Na= 51, Cl= 140
Q(A)c	11	24N/07E-27D01	Na, Ca/Cl	324	Na= 55, Cl= 130
	12	25N/07E-06B01	Na, Ca/HCO ₃	211	Na= 44
	13	25N/07E-15C01	Na/HCO ₃	169	Na= 43
	14	26N/06E-14D01	Na/HCO ₃	147	Na= 43
	15	26N/06E-24D01	Na/HCO ₃	183	Na= 48
Br	16	23N/08E-08K01	Na/HCO ₃ , SO ₄	551	Na= 200, SO ₄ = 170
	17	23N/08E-24J01	Ca, Na/HCO ₃ , SO ₄	173	SO ₄ = 43
	18	24N/08E-19M01	Na/Cl, HCO ₃	341	Na= 94, Cl= 100
	19	26N/07E-04D01	Ca, Na, Mg/HCO ₃ , SO ₄	186	SO ₄ = 50

Comments show concentrations, in milligrams per liter, of constituents that account for anomalous or unusual water types

TRILINEAR DIAGRAMS SHOWING PERCENTAGES OF MAJOR IONS IN
GROUND WATER, EAST KING COUNTY, WASHINGTON

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