

Table 1. Description and geologic setting of hot spring localities in western and central Alaska.

		Geologic Setting				
Name and location	General Description	Province	Host Rock	Remarks	References	
1. Pilgrim: (Kruzgamepa)*	Bendeleben A-6 quadrangle, 65°06'N., 164°55'W. Located 40 mi north of Nome, half-mile south of Pilgrim River.	Seward Peninsula	Concealed	Bedrock concealed; springs occur 2½ mi north of plutonic and high-grade metamorphic rocks of Kigluaik Mountains and 2½ mi south of low-grade metamorphic rocks of Hen-and-Chickens Mountain. Springs are 1½ mi west of inferred fault (Sainsbury and others, 1969). Aero-magnetic survey (State of Alaska Aeromagnetic Survey, 1972, Bendeleben A-4, A-5, A-6 quadrangles) suggests springs may lie along possible east-west fault which may be an extension, or branch, of range front fault bounding south side of central and eastern Bendeleben Mountains (Miller and others, 1972).	Sainsbury and others, 1969	
2. Serpentine: (Arctic)	65°51'N., 164°42'W., Bendeleben D-6 quadrangle; 95 mi north of Nome on Hot Springs Creek.	Seward Peninsula	Biotite granite	Springs occur in Serpentine Hot Springs pluton about one mile from faulted contact. Pluton composed of biotite granite of Cretaceous or Tertiary age; country rock is Precambrian metasiltite and related rocks.	Sainsbury and others, 1969	
3. Lava Creek:	65°13'N., 162°54'W., Bendeleben A-2 quadrangle; 50 mi north of Golovin on south side of Bendeleben Mountains.	Seward Peninsula	Quartz monzonite	Spring occurs almost on contact between Late Cretaceous quartz monzonite of Bendeleben pluton and migmatite zone of Precambrian age. A biotite sample from the Bendeleben pluton has yielded a K-Ar age of 79.8 ± 2.4 m.y. (Miller and others, 1972). Parts of the floor of Lava Creek underlain by basalt of Quaternary age.	Miller and others, 1972	
4. Battleship Mountain:	64°48'N., 162°55'W., Solomon D-2 quadrangle; 20 mi north of Golovin.	Seward Peninsula	Granodiorite	Spring is in granodiorite of Kachauk pluton near contact with Precambrian schistose marble. Granodiorite is of probable Cretaceous age (Miller and others, 1972).	Miller and others, 1972	
5. Kwiniuk:	64°42'N., 162°28'W., Solomon C-1; 9 mi north-west of Elim.	Seward Peninsula	Quartz monzonite	Spring is in Darby pluton about 2 mi from country rock and on or near prominent lineaments in the pluton contacts. Darby pluton is Late Cretaceous in age (Miller and others, 1972).	Miller and others, 1972	
6. Clear Creek:	64°51'N., 162°18'W., Solomon D-1 quadrangle; 16 mi north of Elim.	Seward Peninsula	Quartz monzonite	Springs are in quartz monzonite of Darby pluton less than ¼ mi from contact with Devonian limestone. Pluton-limestone contact is inferred to be major fault (Miller and others, 1972) trending N.18°E.	Miller and others, 1972	
7. Granite Mountain: (Sweepstakes)	65°22'N., 161°15'W., Candle E-5 quadrangle; 40 mi southeast of Candle on the south side of Granite Mountain.	Yukon-Koyukuk	Nepheline syenite	Springs are in small satellitic stock of mafic nepheline syenite about 1 mi south of Granite Mountain pluton of mid-Cretaceous age (Miller, 1972). Country rock is Lower Cretaceous andesite.	Patton, 1967; Miller, 1972	
8. Hawk River:	66°14'N., 157°35'W., Shungnak 1:250,000 quadrangle; located 50 mi south southwest of Kobuk.	Yukon-Koyukuk	Concealed	Spring is in alluvial valley of Hawk River and bedrock is concealed. Based on map position, bedrock is probably hornfelsic andesite of Early Cretaceous age. Spring lies about ¼ mi south of mid-Cretaceous monzonite of Hawk River pluton and very close to east-west fault which cuts pluton.	Patton and others, 1968; Miller, 1970	
9. South:	66°09'N., 157°07'W., Shungnak 1:250,000 quadrangle; located 52 mi south of Kobuk on south side of Purcell Mountains.	Yukon-Koyukuk	Quartz monzonite	Springs are in Late Cretaceous quartz monzonite of Wheeler Creek pluton within ¼ mi of contact with Lower Cretaceous andesite. Springs are approximately on prominent lineament trending N.80°W.	Patton and others, 1968; Miller, 1970	
10. Purcell Mountain:	66°23'N., 156°44'W., Shungnak 1:250,000 quadrangle; located 44 mi south southwest of Kobuk.	Yukon-Koyukuk	Quartz latite	Spring is in Late Cretaceous hypabyssal volcanic complex composed of tuffs, flows, and intrusive rocks. Spring is about ¼ mi from contact with Lower Cretaceous andesite and near contact with granitic pluton.	Patton and others, 1968; Miller, 1970	
11. Division:	66°22'N., 156°44'W., Shungnak 1:250,000 quadrangle; located 38 mi south of Kobuk on north side of Purcell Mountain.	Yukon-Koyukuk	Andesite	Springs are in Lower Cretaceous andesite near prominent N.70°W. trending lineament and about 1½ mi north of quartz monzonite of Wheeler Creek pluton.	Patton and others, 1968; Miller, 1970	

This chart is preliminary and has not been edited or renewed for conformity with Geological Survey standards and nomenclature.