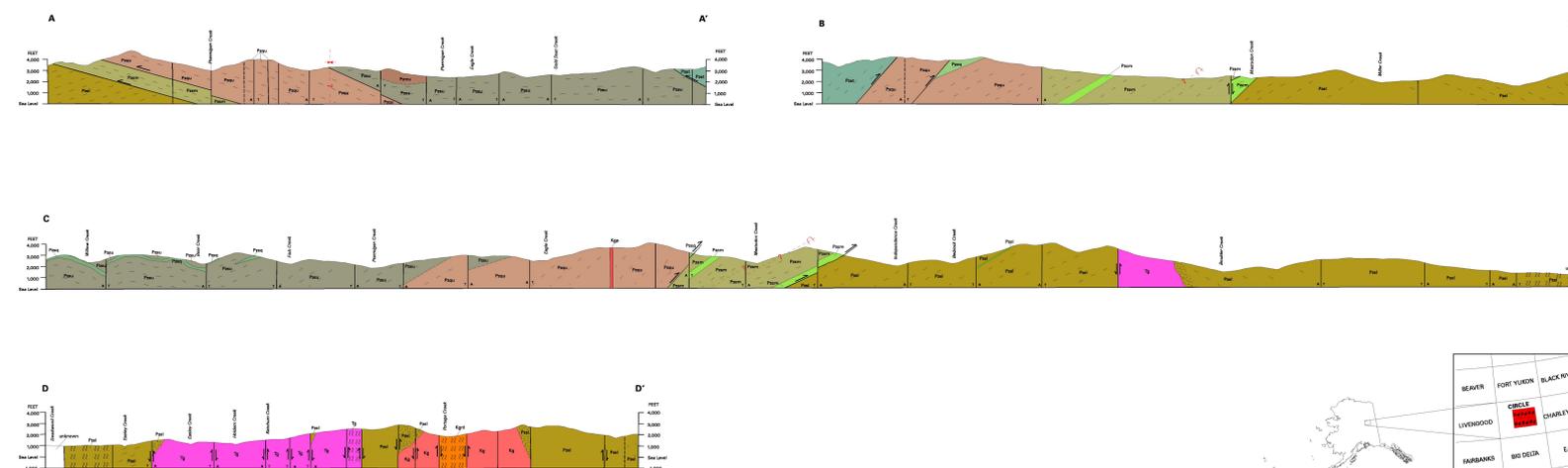
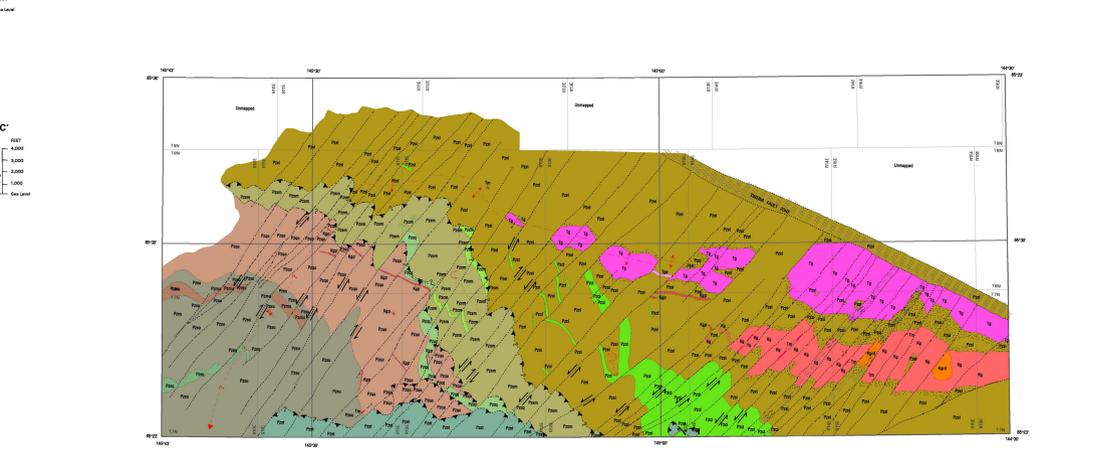


CORRELATION OF MAP UNITS		DESCRIPTION OF MAP UNITS	
<b>UNCONSOLIDATED DEPOSITS</b>		<b>UNCONSOLIDATED DEPOSITS</b>	
Fluvial Deposits	Colluvial Deposits	Fluvial Deposits	
Glacial Deposits	Complex Deposits		
<b>INTRUSIVE ROCKS</b>		<b>INTRUSIVE ROCKS</b>	
<b>METAMORPHIC ROCKS</b>		<b>METAMORPHIC ROCKS</b>	
<b>EXPLANATION OF MAP SYMBOLS</b>		<b>EXPLANATION OF MAP SYMBOLS</b>	
<b>SYMBOLS FOR CROSS SECTIONS</b>		<b>SYMBOLS FOR CROSS SECTIONS</b>	



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METAMORPHIC ROCKS	
<b>Prst</b>	<b>THRUST PLATE SCHIST</b> —Dark gray to green gray, fine to medium grained, slightly calcareous biotite, quartz-muscovite schist, fibrolite-quartz-muscovite schist, and distinct irregular lenses of medium to coarse grained, calcareous albite porphyroblastic muscovite-chlorite schist with interstitial biotite. In one thick, upper member (Prst1) biotite is a common mineral throughout the Upper Quartzite. Thin sections made from the metaclastic rocks of the Prst1 schist have a distinct porphyroblastic texture. The biotite is large and irregularly shaped, and commonly contains inclusions of quartz and calcite. The schist is medium to dark brown weathering surface; they occur as layers or thin, laterally extensive lenses in calcareous chlorite-rich schists that have knobby, crumpled foliation and well-developed schistosity. Actinolite in Prst1 forms large, angular, stubby blades in outcrop. Prst1 schists have common interfolial kinked quartz veins, lenses, and nodules above 1 cm thick and up to 10 cm long. The schistosity is defined by the Upper Quartzite, occur where they occur dominant quartzites, they form subparallel, north-south trending, fine to medium grained, planar to slightly convoluted foliation, fine to medium grained, fibrolite-quartz-muscovite schist, and calcite and chlorite are common in some units. Prst1 schists have a common trace mineral as is ilmenite. Prst1 rocks have local concentrations of iron to moderately thick quartzite and massive quartzite. These rocks have quartzite in clearly dominant in abundance, and calcite and chlorite are common in some units.
<b>Prst1</b>	<b>UPPER SCHIST</b> —Medium to dark gray and medium greenish-gray, fine to medium grained, commonly slightly calcareous quartz-muscovite schist, porphyroblastic albite-quartz-chlorite schist, and lower amounts of calcareous porphyroblastic albite-chlorite schist and chlorite schist (Prst1c). Thin, predominantly fine to medium grained quartzite occurs throughout the section; occasional coarse grained gill layers from a few centimeters up to a meter thick occur in the lower part of the section. The schistosity is defined by the Upper Quartzite, occur where they occur dominant quartzites, they form subparallel, north-south trending, fine to medium grained, planar to slightly convoluted foliation, fine to medium grained, fibrolite-quartz-muscovite schist, and calcite and chlorite are common in some units. Prst1 schists have a common trace mineral as is ilmenite. Prst1 rocks have local concentrations of iron to moderately thick quartzite and massive quartzite. These rocks have quartzite in clearly dominant in abundance, and calcite and chlorite are common in some units.
<b>Prst2</b>	<b>UPPER QUARTZITE</b> —Light to medium gray, fine to medium grained, quartzite, quartz-muscovite schist, and medium to coarse grained, fibrolite-quartz-muscovite schist, and calcite and chlorite are common in some units. Prst2 schists have a common trace mineral as is ilmenite. Prst2 rocks have local concentrations of iron to moderately thick quartzite and massive quartzite. These rocks have quartzite in clearly dominant in abundance, and calcite and chlorite are common in some units.
<b>Prst3</b>	<b>MIDDLE SCHIST AND QUARTZITE</b> —Medium to dark gray and medium greenish-gray, fine to medium grained, commonly slightly calcareous quartz-muscovite schist, porphyroblastic albite-quartz-chlorite schist, and lower amounts of calcareous porphyroblastic albite-chlorite schist and chlorite schist (Prst3c). Thin, predominantly fine to medium grained quartzite occurs throughout the section; occasional coarse grained gill layers from a few centimeters up to a meter thick occur in the lower part of the section. The schistosity is defined by the Upper Quartzite, occur where they occur dominant quartzites, they form subparallel, north-south trending, fine to medium grained, planar to slightly convoluted foliation, fine to medium grained, fibrolite-quartz-muscovite schist, and calcite and chlorite are common in some units. Prst3 schists have a common trace mineral as is ilmenite. Prst3 rocks have local concentrations of iron to moderately thick quartzite and massive quartzite. These rocks have quartzite in clearly dominant in abundance, and calcite and chlorite are common in some units.
<b>Prst4</b>	<b>LOWER SCHIST</b> —Medium to dark gray and medium greenish-gray, fine to medium grained, commonly slightly calcareous quartz-muscovite schist, porphyroblastic albite-quartz-chlorite schist, and lower amounts of calcareous porphyroblastic albite-chlorite schist and chlorite schist (Prst4c). Thin, predominantly fine to medium grained quartzite occurs throughout the section; occasional coarse grained gill layers from a few centimeters up to a meter thick occur in the lower part of the section. The schistosity is defined by the Upper Quartzite, occur where they occur dominant quartzites, they form subparallel, north-south trending, fine to medium grained, planar to slightly convoluted foliation, fine to medium grained, fibrolite-quartz-muscovite schist, and calcite and chlorite are common in some units. Prst4 schists have a common trace mineral as is ilmenite. Prst4 rocks have local concentrations of iron to moderately thick quartzite and massive quartzite. These rocks have quartzite in clearly dominant in abundance, and calcite and chlorite are common in some units.



# GEOLOGIC MAP OF THE CIRCLE MINING DISTRICT, ALASKA

by  
Milton A. Wiltse, Richard D. Reger, Rainer J. Newberry, Garnett H. Fessel,  
DeAnne S. Pinney, Mark S. Robinson, and Diana N. Solie

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