



**EXPLANATION**

<b>IGNEOUS COMPLEX</b>	<b>DIKES OUTSIDE COMPLEX</b>
Residual and secondary phosphate	Weathered igneous
Carbonatite	Tringaitite
Tringaitite	Aplite
Aplite	Pegmatite
Epidiote-nepheline syenite pegmatite	Trachyte
Nepheline syenite pegmatite	Trachyte porphyry
Trachytes, miscellaneous	Andesite
Trachyte porphyry	Diorite
Sodalite trachyte	Garnet feldspathite
Garnet feldspathite	Monzonite
Analcime-olivine metagabbro	Lampophyre
Line-alkali rock	<b>VEINS</b>
Biotite-garnet gneiss	Quartz
Garnet gneiss	Quartz-feldspar
Fine-grained gneiss	Quartz-brookite-rutile
Garnet-biotite metagabbro	Feldspar
Syenite, miscellaneous	Feldspar-carbonate
Sphene-calcic syenite	Apatite
Sphene-nepheline syenite	Contact metamorphic zone
Sphene-nepheline syenite	AS FLOAT OR IN VEINS
Garnet-nepheline syenite	Brookite
Garnet-pseudoleucite syenite	Rutile
Sphene pyroxenite	Rutile paramorph after brookite
Jacupirangite	Contact
Feldspathoidal leucosyenite	Dashed where approximately located, short dashed where indefinite
Bedded trachyte	Gradational contact
Trachyte-pegmatite, univided	Thrust or low angle reverse fault
Altered phonolite and breccia	Dashed where approximately located. Scale back on side of upper plate
<b>METAMORPHIC ROCKS</b>	Axis of anticline
Metamorphosed sedimentary rocks	Fold axes approximately located
<b>SEDIMENTARY ROCKS</b>	Axis of syncline
Hot Springs sandstone	Fold axes approximately located
Arkansas novaculite	Axis of overturned anticline, approximately located
Missouri Mountain shale	Arrow shows direction of dip of limbs
Blaylock sandstone	Axis of overturned syncline, approximately located
Polk Creek shale	Arrow shows direction of dip of limbs
<b>PALEOZOIC</b>	Strike and dip of beds
<b>DEVONIAN AND MISSISSIPPIAN</b>	Strike and dip of overturned beds
<b>CARBONIFEROUS</b>	Strike of vertical beds
<b>SILURIAN</b>	Strike and dip of foliation
	Strike of vertical foliation
	Strike and dip of joints
	Strike of vertical joint
	Sample locations
	Outline of open pits and trenches