Appendix B

Contents

CHEROKEE

TABLE 2C-2

Rock Classification, Mineral Composition And Textural Aspects Of Rock Samples From Cherokee And York Counties, South Carolina

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Only minerals comprising 10 percent or more of the mode are tabulated.
Only essential minerals and mineral groups are used in the rock name.
Samples are arranged according to the major map units into which they fall.

SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
MAFIC GNEISS				
B-18 Depth - 170.1'	Actinolite Biotite Gneiss	40% Actinolite 30% Plagioclase 20% Biotite	Massive	A massive, fine-grained medium dark greenish gray rock with a 1/8" veinlet of calcite. Dark minerals appear to be a mixture of biotite and actinolite. Dark crystals seem to make up 60 - 70 percent of the rock and may occur as "large" crystals but with numerous inclusions. Dark minerals appear to constitute almost all the rock immediately adjacent the calcite vein.
B-53 Depth - 89.5'	Biotite Gneiss	45% Biotite 30% Plagioclase 15% Quartz	Foliated	Like B-18, 170.1, except it does not have chlorite nor a calcite vein. Certain zones have a lot of calcite, others have little. Uniform, foliated, fine-grained.
B-94 Depth - 141.6'	Mafic Gneiss	20% Quartz 30% Plagioclase 30% Chlorite 20% Biotite	Very fine-grained sericitized	Slickensided surface, somewhat granulated mineral grains adjacent. Development of calcite and chlorite at and near surface. Surface is offset by fracture that is healed by calcite.
B-102 Depth - 81.0'	Biotite Gneiss	40% Biotite 27% Quartz 20% Plagioclase	Lepidoblastic or poikiloblasgic in biotite-rich parts. Otherwise granoblastic.	Fine grained. Some compositional layering. Other mafic minerals total 8 percent. Probable metasiltstone or andesitic metatuff.
B-230 Depth-84.3'	Mafic Gneiss	20% Quartz 35% K-Feldspar 25% Hornblende 15% Biotite	Gneissic	Slickenside surface follows fracture along which essentially no movement occurred. It can be traced into undeformed rock. The rock broke along the slickenside surface until almost the end of the surface. Then followed a calcite vein. Some chlorite on the surface.

Amendment 2
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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
BP-9 Depth - 83.6' - 84.0' (Amphibole - Rich Layer)	Hornblende-Chlorite Gneiss	50% Hornblende 23% Feldspar 20% Chlorite	Porphyroblastic. No recognizable relict textures.	Porphyroblasts of hornblende, chlorite and garnet in finer grained feldspar and quartz.
25A 500 ft N. of Kings Creek on St. Hwy. 209	Epidotite	70% Epidote 25% Quartz	Equigranular, massive to weakly lineated, as shown by poor alignment of sparce hornblende crystals	The rock is pale greenish-gray, medium fine-grained with some brownish staining on weathered surfaces and exhibiting a massive, saccharoidal texture and containing thin veinlets of quartz.
26 800 ft N. of Kings Creek on St. Hwy. 209	Hornblende Gneiss	45% Hornblende 40% Andesine 10% Epidote	Massive, no preferred orientation of crystals; little alteration except for presence of epidote	This medium grain-sized, gray colored rock exhibits an equigranular, massive texture. It appears to be composed of about equal amounts of hornblende and feldspar.
CC-206 Quarry 1000 ft SW of Kings Creek at Jct. St. Hwy. 209 and 816	Hornblende Biotite Gneiss	50% Hornblende 20% Plagioclase 15% Biotite 10% Quartz	Unoriented hornblende and biotite. Granoblastic quartz and untwinned plagioclase.	Probable metamorphosed andesitic lava flow or shallow intrusion.
FELSIC GNEISS				
B-11(a) Depth - 50.4' (Lower Portion of Sample)	Felsic Gneiss	40% Plagioclase 40% Quartz 10% Biotite	Weakly foliated	This sample is from a core consisting of two rocks in contact. This particular sample is gray-colored, medium fine-grained, and the main difference between this and sample B-11, 50.4'(b) appears to be in percentage of dark minerals. The rock is foliated by virtue of parallel alignment of dark mineral grains. A white veinlet is along the contact; foliation is parallel to the contact. Some veinlets (partly open space) cut across foliation.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-11(b) Depth - 50.4' (Upper Portion of Sample)	Plagioclase Biotite Gneiss	50% Plagioclase 40% Biotite	Weakly foliated	This sample is from a core consisting of two rocks in contact. This particular sample is darker gray than B-11, 50.4'(a), with the main difference apparently being due to a greater percentage of dark minerals. (See Specimen B-11, 50.4', (a) discussion.
B-41 Depth - 111.5'	Plagioclase-Biotite Gneiss	35% Plagioclase 30% Biotite 28% Quartz	Fine-grained gneissic texture. Absence of compositional banding on the sample studied.	A medium gray colored, fine-grained rock exhibiting gneissic texture and containing about one-third biotite and two-thirds light colored minerals including some muscovite.
B-51 Depth - 76.4'	Felsic Gneiss	56% Plagioclase 20% Quartz 10% Biotite	Plagioclase and quartz with other minterals intergrown.	Plagioclase partly altered to mica and calcite. Thin zones of aligned micas. Contains slickensided surface rich in micas. The post-metamorphic part of the movement appears to be on the order of millimeters.
B-53 Depth - 63.8' (Foliated Portion)	Mica Gneiss	30% Biotite 30% Sericite 15% Plagioclase 15% Quartz	Foliated	A gray, medium fine-grained foliated rock in contact with lighter gray (non-foliated?) rock. Foliation is produced by parallel orientation of augen of biotite and pyrite blebs and stringers. The rock contains much calcite, especially in the lighter gray portion. Biotite makes up 30-40 percent of the rock, pyrite may constitute 5 percent of the rock.
B-53 Depth - 63.8' (More Massive Portion)	Quartz Calcite Gneiss	50% Quartz 20% Calcite 15% Plagioclase	Weakly foliated to non-foliated.	A gray, medium fine-gtained follated rock in contact with a lighter gray (non-foliated?) rock. Foliation is produced by parallel orientation of augen of biotite and pyrite blebs and stringers. The rock contains much calcite, espeically in the lighter gray portion.
B-53 Depth - 90.7'	Felsic Biotite Actinolite Geniss	40% Plagioclase 30% Biotite 15% Actinolite 10% Quartz	Weakly foliated	Very much like B-18, 170.1, including grain size, amount of dark minerals and chlorite (with perhaps somewhat less chlorite). Has a calcite vein and small amount of calcite in the matrix. Magnetite and pyrrhotite (?) present.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-53 Depth - 108.5'	Felsic Gneiss	40% Quartz 35% Plagioclase 10% Muscovite	Foliated	Light gray, foliated rock. Biotite constitutes less than 10 percent of rock; minor calcite and a trace of pyrite are present. Sericite is developed along shear planes.
B-58 Depth - 33.1' (Felsic Part)	Felsic Gneiss	60% Plagioclase 20% Quartz	Granoblastic	Plagioclase and quartz up to 3 mm diameter in fine-grained matrix.
B-58 Depth - 33.1' (More Mafic Part)	Plagioclase - Biotite Gneiss	40% Plagioclase 25% Biotite 15% Quartz	Equigranular	Probable metadacite.
B-61 Depth - 115.3'	Felsic Gneiss	50% Plagioclase 40% Quartz	Relatively massive, tuffaceous	A gray, almost massive rock that appears at first glance to be medium grain-sized, but the larger crystals are more like ghost crystals or almost all replace crystals. A small trace of calcite associated with biotite. Quartz (?) is mostly blue, other minerals are brownish cloudy; biotite occurs as clusters of tiny crystals. Quartz is myrmekitic. Plagioclase is heavily sericitized.
B-62A2 Depth - 146.4'	Quartz-Muscovite Gneiss	55% Quartz 20% Plagioclase 20% Muscovite	Granoblastic	Micas scattered among quartz and feldspar or arranged in streaks with subparallel arrangement. Probable metasandstone.
B-62A2 Depth - 146.5'	Felsic Gneiss	55% Plagioclase 20% Muscovite 15% Quartz	Fine grained equigranular	Fine grained with veinlets and patchy aggregates of quartz.
B-64 Depth - 119.9'	Plagioclase Biotite Gneiss	57% Plagioclase 20% Biotite 15% Quartz	Fine grained granoblastic	Poikiloblastic muscovite and plagioclase. Quartz in stringers, aggregates and intergrown with other minerals.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-65 Depth - 90.1' - 90.6' (Medium Gray Rock)	Metagranodiorite(?)	30% Plagioclase 25% Quartz 20% Biotite 15% Orthoclase(?)	Mildly sheared, but generally massive	Fine grained, Mildly sheared and somewhat altered and sericitized. Rounding (corrosion?) and sericitization of feldspars. Sutured contacts between grains.
B-65 Depth - 90.1' - 90.6' (Light Gray Rock)	Metagranodiorite(?)	40% Plagioclase 30% Quartz 25% Orthoclase(?)	Mildly sheared but Generally massive, Aplitic(?)	Fine grained. Mildly sheared and somewhat altered and sericitized. Rounding (corrosion?) and sericitization of feldspars. Sutured contacts between grains.
B-96P Depth - 86.2'	Metagranodiorite	30% Quartz 30% Plagioclase 20% K-Feldspar	Gneissic to granitoid, Medium Grain Size	– Contains calcite veinlets – Feldspars sericitized
	Mafic Gneiss (Inclusion)	60% Hornblende 25% Plagioclase 10% Epidote	Fine-grained, gneissic	Contains slickensided surface near contact with metagranodiorite. Surface irregular with parallel and branching fractures. No offset (calcite veins) and no granulation of rock alongside surface.
B-101 Depth - 12.0'	Felsic Gneiss	70% Oligoclase 15% Quartz	Complex interlocking texture.	Biotite and muscovite in intersecting streaks. Fine grained groundmass with some larger oligoclase. Probable dacitic metatuff or metadacite.
B-101 Depth - 58.1'	Calcitic Felsic Gneiss	39% Plagioclase 25% Quartz 15% Calcite 10% Epidote	Generally granoblastic. Some discontinuous layered structure.	Inequigranular. Fine to medium grained. Plagioclase generally untwinned.
B-102 Depth - 82.0'	Felsic Gneiss	35% Quartz 31% Plagioclase 15% Biotite	Mainly granoblastic becoming nematoblastic in the presence of hornblende and lepidoblastic in the presence of biotite	Fine grained, inequigranular. Distinct quartz and quartz-calcite layers. Probable metasiltstone or dacitic metatuff.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-112 Depth - 32.5'	Calcareous Altered Felsic Gneiss	65% Calcite 20% Quartz 10% Chlorite	Equigranular	Abundant pyrite; quartz veins; much chlorite and some pyrite altering from some earlier ferromagnesian silicate. Slickensided surfaces developed along irregular and branching fractures. Abundant development of chlorite along surfaces even where they cross quartz veins.
B-114 Depth - 70.8'	Felsic Gneiss With Slickensided Surface	58% Plagioclase 20% Chlorite 10% Quartz	Granoblastic-lepidoblastic with faint foliation	Probably a dacitic meta-tuff. Slickensided surface too thin to be retained in thin section. No sign of mylonitization or crushing.
B-119 Depth - 98.6'	Felsic Gneiss With Slickensided Surface	43% Plagioclase 25% Biotite 15% Quartz	Granoblastic-Lepidoblastic	Originally a fine tuff or siltstone. Extremely thin chlorite coating, no sign of shearing in the rock. Cut by quartz-calcite veinlet 1 mm thick. Contains garnet.
B-119 Depth - 102.5'	Felsic Gneiss With Slickensided Surfaces	40% Quartz 20% Plagioclase 15% Amphibole 10% Chlorite	Variable, granoblastic to lepidoblastic	Originally a tuff or siltstone. Slickensides developed in a zone 0-½ mm thick composed of chlorite and calcite. No sign of crushing or mylonitization in the rock
B-119 Depth - 102.8'	Felsic Gneiss With Slickensided Surface	40% Quartz 23% Plagioclase 15% Amphibole 10% Opaques	Granoblastic, with sheafs and patches of platy minerals	No good evidence for origin. Slickensides developed on zone of chlorite and calcite up to 0.2 mm thick. Some chlorite flakes at an angle to zone.
B-119 Depth - 106.9'	Felsic Gneiss, Rich In Calcite	46% Plagioclase 20% Biotite 20% Calcite	Lepidoblastic	Section cut by branching series of fractures and thin zones of microbreccia; one fracture shows offset of 0.3 mm. Rock is not mylonitized, but is affected by brittle fracturing.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-139P Depth - 86.0'	Felsic Gneiss With Schistose Zone And Minor Slickensides	40% Quartz 18% Plagioclase 15% Chlorite 10% Calcite	Mainly granoblastic, with lepidoblastic zone	Fine-grained rock cut by schistose zone ½-1 in. wide, rock breaks along irregular chlorite-rich surface with tiny slickensides. Schistose zone is an early shear zone.
B-139P Depth - 88.2'	Altered Felsic Gneiss Cut By Veinlets Of Calcite	44% Plagioclase 25% Chlorite 10% Calcite 10% K-Feldspar	Very fine-grained granoblastic, some reflect outlines of minerals.	Altered rock cut by a fracture zone about 3 mm thick; calcite veinlet follows the fracture zone. Calcite is not fractured and is probably younger than any shearing.
B-141P Depth - 60.2'	Metagranodiorite	40% K-Feldspar 25% Quartz 20% Plagioclase 10% Hornblende	Granitoid. Coarse-grained.	Slickensided surface developed on thick layer of calcite-quartz-hornblende rock that is in contact with the other two. Slickenside surface marked by development of chlorite and essentially no deformation of any mineral grains alongside the surface.
	Mafic-Gneiss (Inclusion)	60% Quartz - Plagioclase 25% Biotite 15% Hornblende	Gneissic	
B-141P Depth - 60.2'	Same rock as above except cut at right angles			Slickensided surface traced from broken and exposed surface into rock where it disappears into a series of ever branching and diminishing fractures.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-167P Depth - 92.8'	Felsic Gneiss	60% Quartz 15% Plagioclase 10% K-Feldspar 10% Biotite-Chlorite	Poorly developed foliation except for a schistose band	Irregular slickensided surfaces across one end sub-parallel with schistose banding in the rock. Surface contains thin chlorite film. Mineral grains essentially undeformed alongside the surface, although some fine-grained material is associated with the chlorite. (Thin section cut across the striations on the slickensided surface).
B-167P Depth - 92.8'	Same sample as above except thin section cut parallel with striations on slickensided surface			Fairly irregular slickensided surface with associate sub-parallel fractures within the rock concave toward the surface. Surfaces marked by thin development of chlorite, fine-grained feldspar and some orientation of mica grains into the plan of the slickensided surface. The latter is not observed where the section is cut normal to striations.
B-222 Depth - 40.3'	Felsic Gneiss	40% Quartz 35% Plagioclase	Granitoid to weakly gneissic. Some silification.	Slickensided surface rather irregular with subhedral chlorite and fine grained K-Feldspar some biotite may be involved.
B-233 Depth - 84.0'	Altered Felsic Gneiss	35% Quartz 25% Epidote 20% Calcite	Weakly Foliated	Rock has been strongly epidotized. Slickensided surface developed along one of several undulatory and branching sub-parallel fractures characterized by calcite filling. No offset of calcite veinlets that partially cross-cut the slickensided surface.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-236 Depth - 59.4' - 59.7'	Felsic Augen Gneiss	35% Quartz 25% Plagioclase 20% Muscovite-Sericite 10% Potash Feldspar 10% Biotite	Porphyroblastic, lepidoblastic.	A medium grained, light yellow-gray genissic rock containing thin, radomly oriented, brownish stringers. Foliation surfaces are coated with a black oxide. The rock appears to have been coarser grained originally. Stresses caused internal shearing to create a gneissic texture.
B-236 Depth - 72.0'	Felsic Gneiss	40% Potash Feldspar 30% Muscovite-Sericite 25% Quartz	Schistose, porphyroblastic, lepidoblastic.	A grey, with minor orange mottling, medium fine-grained schistose rock containing a ¾ inch, somewhat porous zone of shearing and brecciation. Folding of the schistose rock alongside the fault zone is evident.
B-236 Depth - 75.4' - 75.7'	Calcareous Felsic Gneiss	30% Quartz 20% Calcite 20% Muscovite-Sericite 15% Potash Feldspar 10% Plagioclase	Lepidoblastic, gneissic.	A gray, with minor orange mottling, mediun fine-grained gneissic rock with minor fracturing and deformation. The rock was deformed and fractured with the last fracture filled with potash feldspar.
B-236 Depth - 83.4' - 83.7'	Felsic Augen Gneiss	30% Quartz 30% Muscovite-Sericite 25% Potash Feldspar	Porphyroblastic, lepidoblastic.	A gray, medium fine-grained gneissic rock continaing very thin, greenish to whitish stringers. Foliation surfaces are covered with sericite. Was probably originally an igneous rock converted by mild shearing and alteration to a gneiss.
B-258 Depth - 104.6'	Felsic Geniss	40% Plagioclase 30% K-Feldspar 20% Quartz	Weakly foliated	Slickensided surface is developed on irregular and branching fracture. Contains calcite filling in part. No chlorite. No deformation of mineral grains along irregular surface.
BP-2 Depth - 82.3'	Felsic Gneiss	35% Quartz 25% Plagioclase 20% K-Feldspar	Granitoid to weakly gneissic.	Many veinlets of calcite and chlorite. Slickensided surface characterized by development of chlorite and fine-grained K-feldspar. Where the surface passes through calcite, chlorite and fine-grained felspar replace the calcite as easily as silicate minerals. Fracture along which surface developed is irregular and branching. Offset is approximately 4 mm.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
BP-6	Felsic Gneiss	40% K-Feldspar 30% Quartz 15% Biotite	Gneissic with extensive development of sericite. Contacts highly sutured.	Slickensided surface marked by thin, yellow-green chlorite containing central layer of calcite in places. Surface ranges from regular where it contains calcite to irregular at other places. Contains branching surfaces. Some apparent deformation in micas near the surface.
BP-7 Depth - 59.8'	Felsic Biotite Gneiss	50% Plagioclase 25% Quartz 20% Biotite	Foliated; large crystals being replaced by fine-grined material	A gray, medium fine-grained, foliated rock. Biotite occurs as anastomosing stringers of tiny crystals. Calcite is abundant but generally limited to veinlets.
BP-7 Depth - 70.3'	Felsic Actinolite Hornfels	30% Plagioclase 25% Quartz 25% Actinolite 15% Biotite	Hornfelsic	A gray, essentially massive rock with biotite mostly scattered throughout the rock, but also occurring in randomly oriented planes or stringers like BP-7, 59.8' but along more regular lines. Very little to no calcite present.
BP-9 Depth - 83.6' - 84.0' (Main Part)	Feldspar-Chlorite Gneiss	30% K-Feldspar 25% Plagioclase 20% Chlorite 15% Quartz	Porphyroblastic no recognizable relict texture.	Porphyroblasts of chlorite in a fine grained matrix of turbid K-feldspar, plagioclase, quartz, opaques and epidote.
Geologic Test Pit 9 Center	Fine Grained Inclusion In Felsic Gneiss	50% Plagioclase 30% Biotite 15% Quartz	Very fine-grained, granoblastic texture	Inclusion about 2 inches across, originally an igneous rock(?), affected by metamorphism and possibly metasomatism.
52A St. Hwy. 102, 600' N. of Jct. St. Hwy. 103	Metadacite Porphyry	50% Andesine-Oligoclase 30% Quartz 10% Muscovite	The rock is essentially massive with about 15 percent phenocrysts (60% is plagioclase and 40% is rounded [corroded?] quartz).	A pale yellowish gray, prophyritic rock containing "phenocrysts" of quartz, feldspar, and sericite. The groundmass is quite fine-grained.

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
FELSIC SCHIST				
B-41 Depth - 153.5' (Finer grained part)	Quartz Muscovite Schist	55% Quartz 30% Muscovite 10% Calcite	Schistose	A gray colored medium fine-grained mica schist consisting of quartz and muscovite with minor biotite.
B-41 Depth - 153.5' (Coarser grained part)	Mica Schist	50% Muscovite 40% Biotite 10% Quartz	Porphyroblastic	A gray colored mica schist consisting essentially of a fine-grained muscovite matrix that contains medium-sized grains of biotite.
B-42 Depth -107.2' - 107.4' (Inclusion)	Sericite Phyllite	95% Sericite	Phyllitic	Pyrite (?) and biotite at inclusion-vein contact. Fine-grained.
B-82 Depth - 124.0' - 124.4'	Phyllite	40% Quartz 19% Plagioclase 15% K-Feldspar 15% Muscovite	Fine grained with coarse, quartz	Curved micaceous streaks may be compositional layering. K-feldspar associated with quartz layers. Minor post-crystallization deformation. Strong pre-metamorphic deformation.
B-254 Depth - 76.9' - 77.3'	Calcareous Schist	35% Quartz 30% Muscovite 20% Calcite 10% Potash Feldspar	Schistose with evidence of cataclastic as well as crystalloblastic deformation.	A pale tan-gray, gneissic rock. The texture is medium-grained and trends toward an augen gneiss. Rupture and crystallization have alternately predominated in the metamorphic history of the rock. Crystal cross-cutting of fracture lines indicate that minor crystallization occurred after the last episode of deformation.
B-254 Depth - 78.4' - 79.0'	Calcareous Schist	40% Quartz 35% Muscovite 20% Calcite	Porphyroblastic, schistose.	A medium-grained, pale tan-gray, gneissic rock trending toward an "augen" gneiss. Some tectonic zones are present as well as calcite veinlets. This rock appears to have formed through a long history of metamorphic deformation. It does not, however, appear to have evidence for post-granulation recrystallization. There is no evidence of contortion or discontinuous features.

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B-254 Depth - 79.7' - 80.7'	Calcareous Schist	40-50% Quartz 10% Calcite	Schistose, lepidoblastic.	This rock contains a cataclastic crystalloblastic zone. Potash feldspar may be present in the rock in quantities as mucah as 30%. It is a medium-grained schistose rock with "augen" and a purplish deformed zone. The rock appears to have been created through a long history of metamorphic deformation. Crystallization as well as deformation has predominated in alternating cycles.
B-254 Depth-86.1' - 86.9'	Calcareous Schist	30% Potash Feldspar 30% Calcite 25% Quartz	Porphyroblastic, cataclastic, schistose.	A medium grained orangish schistose rock with apparent "augen" and deformation zones. Contains fracture lines which are highly contorted and often replaced.
BP-6 Depth - 120.4' - 120.5'	Phyllite	60% White Mica 20% Quartz 15% Feidspar	Mostly lepidoblastic with some granoblastic streaks and aggregates.	Grains and aggregates of quartz and strongly altered feldspar, mostly untwinned oligoclase, in a matrix of mainly strongly aligned muscovite (?).
28 1600 ft N. of Kings Creek on St. Hwy. 209	Quartz-Sericite Schist	55% Quartz 45% Sericite	Schistose, large quartz grains replaced along margins by sericite.	A fine-grained, almost white rock with traces of tiny black crystals and some brownish staining.
QUARTZITE				
B-45 Depth - 139.0'	Micaceous Quartzite	70% Quartz 30% Sericite	Sheared and granulated with sericite oriented along shears.	Light gray to buff; thinly layered, fine grained, sheared and metasomatized.

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Samples are arranged according to the major map units into which they fall.

SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-45 Depth - 140.4'	Micaceous Quartzite	90% Quartz 10% Sericite	Foliation defined by fine grained quartz bands and sericite. Sheared and recrystallized. Angular, rotated and cemented breccia blocks.	Light gray, sheared and silicified. Early shearing produced sericite. Later brecciation followed by cementation.
B-45B Depth - 182.4'	Sericitized-Chloritized Quartzite Breccia	45% Quartz 30% Sericite 15% Chlorite 10% Calcite	Brecciated.	Dark green, fine grained original sandstone. Initially metamorphosed and sheared. Later brecciated and calcite cemented. Breccia blocks are foliated, sericitized and chloritized quartzite.
B-114 Depth - 61.7'	Quartzite With Slickensided Surface	90% Quartz	Granoblastic	Slickensided surfaces developed on chlorite-rich zones up to ½ mm thick, with films of calcite, and pyrite cubes. Originally a siltstone.
B-114 Depth - 62.1'	Calcareous - Sericitic Quartzite	75% Quartz 10% Calcite 10% Muscovite	Gneissic	Slickensided surface contains calcite film with development of brownish chlorite between film and adjacent rock surfaces. Micaceous material oriented perpendicular to surface. No granulation of mineral grains on adjacent surfaces. Possible 2 mm offset.
B-114 Depth - 62.8'	Sericitic Quartzite	80% Quartz 10% Muscovite	Gneissic	Some calcite veinlets. Slickensided surface developed on irregular and branching fracture. Parallel fractures in rock control development of sericite. Slickensided surface contains development of chlorite that also replaces adjacent quartzite. Some calcite in the chlorite film coating the surface.

Amendment 2
(New)

CHEROKEE

TABLE 2C-2

Rock Classification, Mineral Composition And Textural Aspects Of
Rock Samples From Cherokee And York Counties, South Carolina

Only minerals comprising 10 percent or more of the mode are tabulated.
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SAMPLES DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
B-114 Depth - 71.1'	Sericite-Chlorite Quartzite With Slickensided Surface In Schistose Zone	75% Quartz 20% Sericite	Granoblastic, with lepidoblastic streaks.	Contains a schistose zone about 6mm thick that is rich in mica and chlorite; slickensided surface is developed in this zone. Clinozoisite crystals cut across schistosity.
B-119 Depth - 104.5'	Micaceous Quartzite	75% Quartz 15% Biotite	Equigranular with numberous random veinlets	Calcite veins, quartz veins and irregular fractures along which biotite is developed are common. Slickensided surface is very straight and sharp with very fine grained chlorite film containing slabs of calcite. Some "cross-fiber" chlorite. Two calcite veinlets partially cross-cut the slickensided surface film coating.
B-119 Depth - 106.2'	Calcareous - Sericitic Quartzite	65% Quartz 10% Sericite 10% Calcite 10% Biotite	Gneissic by virtue of parallel zones of sericite	Numerous fractures of short length and branching nature that generally have chlorite developed along them and opaque minerals or calcite within them. One fracture that is very straight is the slickensided surface. Offset along surface to small to measure, no granulation.
B-255 Depth - 168.7'	Sericite Quartzite	73% Quartz 20% Sericite	Granoblastic, with lepidoblastic streaks.	Rock is foliated but not layered. Probably originally an argillaceous sandstone.
31B Site: N64+85 E78+25	Micaceous Quartzite	80% Quartz 20% Sericite	Massive. Locally cataclastic.	A tan-colored, fine-grained rock consisting essentially of quartz grains with some sericite. Iron oxide stains along surfaces and fractures. Sericite occupies spaces largely between quartz grains, thus imparts no schistose testure to the rock.

Amendment 2
(New)

CHEROKEE

TABLE 2C-2

Rock Classification, Mineral Composition And Textural Aspects Of Rock Samples From Cherokee And York Counties, South Carolina

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SAMPLE DESIGNATION	ROCK NAME	MINERAL COMPOSITION	TEXTURE	REMARKS
49 Off extension St. Hwy. 102, 1¼ miles ENE of Jct. St. Hwy. 13	Kyanite Quartzite	45% Sericite 40% Quartz 15% Kyanite	Massive. A Coarse textured, rock that has been extensively replaced by sericite.	A coarse-textured, pale gray rock consisting mostly of quartz and sericite. Quartz and sericite are not intimately mixed.
PEGMATITE				
B-41 Depth - 147.5'	Muscovite Granite	40% Orthoclase 30% Plagioclase 15% Muscovite 10% Quartz	Porphyritic	A salmon colored, medium coarse-grained massive muscovite granite with accessory biotite
B-42 Depth - 107.2' - 107.4' (Vein)	Pegmatite	75% Quartz 20% Microcline	Pegmatitic. Medium to coarse grained.	Undulatory extinction in quartz. Sericite in healed fractures.
DIABASE				
70 Dirt Rd. off St. Hwy. 44, 1½ miles SW of Kings Creek	Olivine Diabase	45% Plagioclase 35% Clinopyroxene 15% Olivine	Subophitic	Minor alteration of pyroxene and olivine to chlorite (?) and serpentine (?).
APLITE				
Geologic Test Pit 9	Aplite Dike	40% Plagioclase 38% Quartz 15% K-Feldspar	Fine-grained, xenomorphic-granular, modified by recrystallization; granophyric intergrowths	Igneous dike that shows some recrystallization, but no strong deformation.
OTHERS				
111D Cherokee Falls	Epidote on Slickensided Surface	N/A	N/A	Epidote replaces material on the slickenside up to the boundary with country rock and also crosses the boundary, in places, as veinlets as well as in larger masses.

Amendment 2
(New)