



EXPLANATION

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| <p>QUATERNARY</p> <p>TERTIARY</p> <p>RIPSEY WASH AREA</p> <p>TRUC POORLY-BEDDED UPPER COBBLE AND BOULDER CONGLOMERATE</p> <p>TR1 MASSIVE TUFFACEOUS SANDSTONE; EXTENSIVELY ALTERED TO CLINOPTILOLITE</p> <p>TR2 INTRAFORMATIONAL MONOLITHOLOGIC BRECCIAS COMPOSED OF APLITE (ap) AND DIABASE (db)</p> <p>TR3 POORLY-BEDDED, MASSIVE LOWER BOULDER CONGLOMERATE</p> | <p>GILA RIVER AREA</p> <p>QTg GILA CONGLOMERATE; POORLY BEDDED, MODERATELY INDURATED COBBLE AND BOULDER CONGLOMERATE CONTAINING PRECAMBRIAN, PALEOZOIC AND TERTIARY ROCK FRAGMENTS CONTAINING:</p> <p>Thrc WELL-BEDDED, WELL-INDURATED RED COBBLE CONGLOMERATE WITH ANDESITE MATRIX</p> <p>Thrc INTRA-FORMATIONAL MONOLITHOLOGIC BRECCIAS COMPOSED OF APLITE (ap), DIABASE (db), YOUNGER PRECAMBRIAN QUARTZITE (q), PALEOZOIC LIMESTONE (Pls), LARAMIDE PORPHYRY (Lgp), AND CRETACEOUS (P) ANDESITE AGGLOMERATE (Ka)</p> <p>Ths THINLY-BEDDED, GRAY TO MAROON SHALE AND SANDSTONE UNITS</p> <p>Thbc POORLY-BEDDED, WELL INDURATED COBBLE AND BOULDER CONGLOMERATE CONTAINING ORACLE GRANITE, APLITE, DIABASE, QUARTZITE, LIMESTONE AND LARAMIDE PORPHYRY ROCK FRAGMENTS</p> | <p>LARAMIDE</p> <p>Lgdp GRANODIORITE PORPHYRY (gdp), MONZONITE PORPHYRY (mp), QUARTZ MONZONITE PORPHYRY (qmp), RHYOLITE PORPHYRY (rp) DIKES AND SMALL INTRUSIVE BODIES (K-Ar AGE 63.M.Y.)</p> <p>Lgdq SATTELLITIC GRANODIORITE (Lgd) AND QUARTZ MONZONITE (Lqm) STOCKS</p> <p>Lgdp GRAYBACK GRANODIORITE PLUTON (K-Ar AGE 63.M.Y.), WELL-EXPOSED ON GRAYBACK MTN.; RANGES FROM BIOTITE-RICH GRANODIORITE TO MUSCOVITE QUARTZ MONZONITE</p> <p>Lsd Lhd DIORITE-QUARTZ DIORITE INTRUSIVE BODIES INCLUDING SONORA DIORITE (K-Ar AGE 69.M.Y.) AND HACKBERRY DIORITE (Lhd)</p> | <p>CRETACEOUS</p> <p>Ka ANDESITE AGGLOMERATE ASSOCIATED WITH ALLOCHTHONOUS CRACKLE BRECCIAS IN HACKBERRY FORMATION; PROBABLY OF CRETACEOUS AGE</p> | <p>PALEOZOIC</p> <p>Pls UNDIFFERENTIATED FOSSILIFEROUS LIMESTONES, INCLUDE DEVONIAN, MISSISSIPPIAN AND PENNSYLVANIAN () STRATA; NON-BRECCIATED IN THE FLORENCE MINE AREA; COMPLETELY SHATTERED AS MONOLITHOLOGIC BRECCIAS WITHIN THE HACKBERRY FORMATION</p> | <p>YOUNGER PRECAMBRIAN</p> <p>Apache Group</p> <p>db DIABASE, DARK GREENISH GRAY SILLS AND DIKES IN APACHE GROUP AND GRANITIC BASEMENT COMPLEX</p> <p>hq TROY QUARTZITE, RED TO LIGHT GRAY, THIN- TO THICK-BEDDED FELDSPATHIC QUARTZITE</p> <p>ml MESCAL LIMESTONE, DOLOMITIC LIMESTONE WITH SILICEOUS SEGREGATIONS AND STROMATOLITE UNITS</p> <p>ds DRIPPING SPRING QUARTZITE, THIN- TO THICK-BEDDED FELDSPATHIC QUARTZITE AND SILTSTONE</p> <p>bc BARNES CONGLOMERATE; WELL-ROUNDED QUARTZ, QUARTZITE AND RED CHERT PEBBLES IN FIRM ARKOSIC MATRIX</p> <p>pf PIONEER FORMATION WITH BASAL SCANLAN CONGLOMERATE; MAINLY THINLY-BEDDED, SLOPE FORMING MAROON MUDSTONES AND SILTSTONES OVERLYING 0.5-1 FOOT THICK PEBBLE CONGLOMERATE</p> | <p>OLDER PRECAMBRIAN</p> <p>opp APLITE PORPHYRY MASSES (opp) AND IRREGULAR APLITE DIKES (op); APLITE MASSES CONTAIN K-FELDSPAR AND PLAGIOCLASE PHENOCRYSTS AND SOME BIOTITE CLOTS; UNIT INCLUDES MUSCOVITE GRANITE ALONG SOUTHERN MAP BOUNDARY</p> <p>gr ORACLE GRANITE; COARSE GRAINED WITH 0.5-1 INCH PINK K-FELDSPAR PHENOCRYSTS AND LARGE BIOTITE AGGREGATES; LOCALLY STRONGLY FOLIATED</p> |
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| <p>45 STRIKE AND DIP OF BEDDING</p> <p>90 STRIKE AND DIP OF OVERTURNED BEDS</p> <p>⊙ HORIZONTAL BEDS</p> <p>75 STRIKE AND DIP OF FOLIATION</p> <p>75 STRIKE AND DIP OF JOINTS; LOCALLY CONTAINING EPIDOTE (ep), CALCITE (ca), LIMONITE (lm) AND K-FELDSPAR (K)</p> <p>65 TEND OF FISSURE VEINS SHOWING DIP</p> <p>TEND OF MINERALIZED FRACTURES</p> <p>⊙ TEND OF BRECCIATED MAJOR QUARTZ VEIN</p> | <p>75 STRIKE AND DIP OF HIGH ANGLE FAULT SHOWING DIP, DASHED WHERE INFERRED; FAULT TRACE LOCALLY INDICATED BY CALICHE (cal)</p> <p>30 TRACE OF LOW ANGLE FAULT SHOWING DIP, DASHED WHERE INFERRED</p> <p>••••• BRECCIATION IN ALLOCHTHONOUS SEDIMENTARY ROCKS</p> <p>••••• INTRUSION BRECCIAS RELATED TO DIORITE AND GRANODIORITE INTRUSIVE MASSES</p> <p>— LINE OF CROSS-SECTION</p> <p>• DRILL HOLE</p> <p>□ MINE SHAFT</p> <p>x PROSPECT PIT</p> |
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GEOLOGY BY E.A.SCHMIDT

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ARIZONA GEOLOGICAL SURVEY
CONTRIBUTED MAP C.M-89-A

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