

Approximate metagraywacke-schist boundary of Postlethwaite and Jacobson (1987)

Morehouse's Gorman-Buckboard Fault

Explanation

Map Symbols	
53	strike/dip of foliation, w/mylonitic lineation
53	mylonitic foliation, w/lineation on Fault III
—	lithologic contact
54 66 D	high-angle fault, showing dip in black font; Up/Down motion determined from map relations or Riedel shears; rake of striations plotted as red font in quadrant of acute angle. Average orientation plotted where multiple measurements taken
28	low-angle normal fault w/striations
⊗	mine shaft or adit
○	assay sample
○	thin section sample
●	dated sample location of Jacobson et al., 1990
●	dated sample location of Nourse (unpublished)
—	fault trace, dashed where approximately located, dotted where buried; strike-slip component shown with arrows
—	low-angle detachment fault

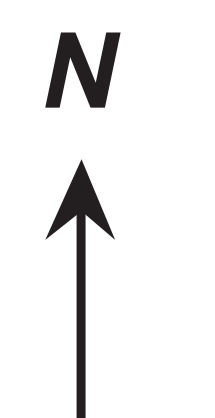
Rock Units	
Qa	Quaternary alluvium
Qls	Quaternary landslide or colluvium
qmy	Quartz-rich mylonite
Klgr	Cretaceous leucocratic Fe-rich biotite alkali granite (97 Ma; 98 Ma)
Kmgr	Cretaceous biotite monzogranite dike (87 Ma)
Kagd	Cretaceous Atolia Grandodiorite (87 Ma); dioritic component = Kdi
dign	Johannesburg Gneiss- dioritic gneiss component (97 Ma; 103 Ma)
grgn	Johannesburg Gneiss- granitic gneiss component (98 Ma; 104 Ma)
m	Johannesburg Gneiss- marble-calcisilicate component (Paleozoic(?))
Krs	Rand Fault I (basal thrust) Cretaceous Rand Schist-metagraywacke component: chl+/bio-musc-qtz-ab; depositional age ~ 80 Ma; Jacobson et al., 2011
Krmch	Cretaceous Rand Schist-metachert component: gt+/musc-qtz
Krms	Cretaceous Rand Schist-mafic (metabasalt) component of Jacobson (1995); chl-act-ep-ab; hblid presnet near Rand thrust
Krbs	Cretaceous Rand Schist-blueschist component of Jacobson (1995); chl-ep-glaucophane/crossite/act-ab

Plate 1

Geologic and Structural Map of the East-Central Rand Mountains

****compiled from thesis mapping by Nourse, 1989; McLarty, 2014; Stewart, 2019-22; also unpublished mapping by Nourse, 2016-22****

Topographic base map is the 1967 USGS 7.5 minute Johannesburg, California quadrangle. Most data located using GPS receiver with datum of NAD27.



500m

Contour Interval = 40 ft