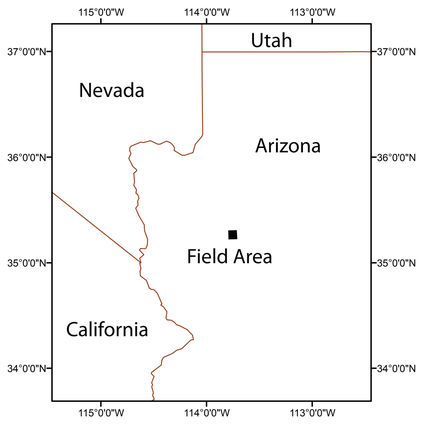
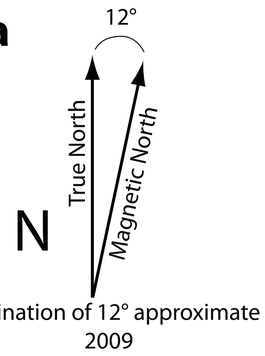
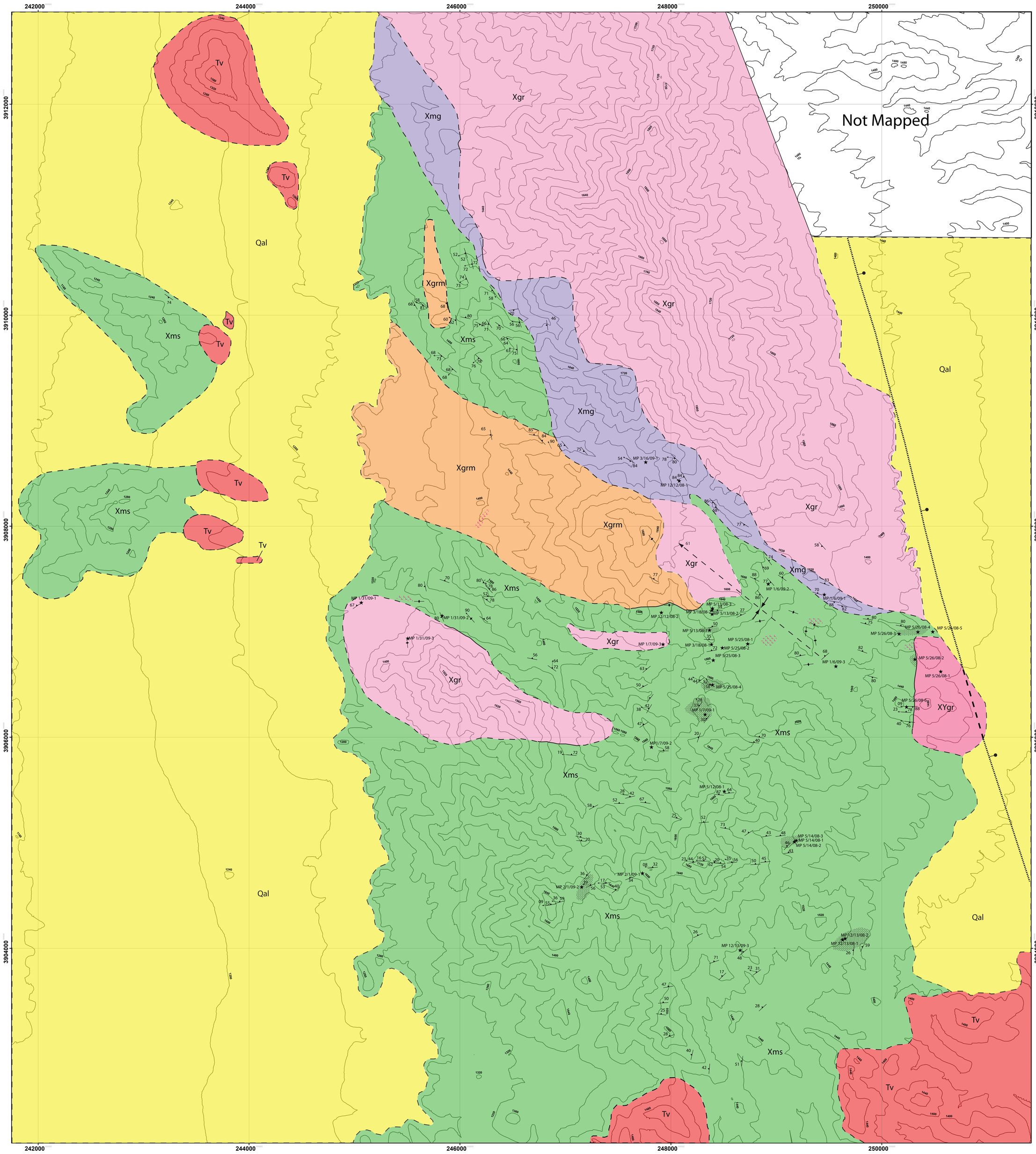
Plate 1. Geologic map of the central Peacock Mountains, Mohave County, Arizona

Mitchell R. Prante, December 2009

The Base map was produced using ESRI ArcGIS from a 5 m resolution Digital Elevation Model of the field area obtained from the USGS.
The Universal Transverse Mercator (UTM) grid is from the NAD 1927 Datum, zone 12, north. Some of the contacts were drawn from high resolution aerial photographs; these contacts were checked in the field.
Contour interval = 40 m







Description of rock units

Tertiary and Quaternary rocks

Qal — Quaternary Alluvium
Poorly sorted , unconsolidated sediment with clasts that vary in size from silt to boulder. Clasts are angular to subrounded and are mostly composed of Paleoproterozoic rocks exposed in the field area.

Tv — Tertiary Volcanic rocks
Black to dark gray, blocky, well exposed outcrops. Composed of basalt and andesite that were not mapped separately.

Unmetamorphosed Plutonic rocks

Diabase dikes
Dikes are green, commonly form shallow slopes, crop out poorly, and are generally 3-10 m wide. Contain coarse-grained and randomly oriented, euhedral hornblende, plagioclase, and biotite. Hornblende is porphyroblastic and approximately 2-10 mm long. Plagioclase is medium to coarse grained and commonly contains sericite alteration. Biotite is fine to medium grained and randomly oriented.

XYgr — Meso-Paleoproterozoic Undifferentiated Granite
Light pink, forms steep slopes and blocky outcrops, medium to coarse grained, undeformed. Contains, K-feldspar + plagioclase + quartz + biotite + garnet + opaques + muscovite.

Paleoproterozoic rocks

Xgrm — Megacrystic Granite
Light pink to gray, forms steep slopes and blocky outcrops, medium to coarse grained, poorly foliated. Contains quartz + K-feldspar + biotite + plagioclase, with 2-3 cm euhedral K-feldspar phenocrysts.

Xgr — Undifferentiated Granite
Light pink, forms steep slopes and blocky outcrops, medium- to coarse- grained, foliated and locally lineated. Granitic rocks with variable mineral assemblages. Contains medium- to very coarse-grained quartz + plagioclase + K-feldspar ± biotite ± hornblende ± garnet

Xmg — Mafic gneiss
Dark gray to black, fine to coarse grained, strongly foliated and locally lineated. Dominated by mafic gneiss with alternating mafic and felsic rich gneissic foliation, with minor amounts of granitic dikes and psammitic schist. Mafic gneiss contains medium- to coarse- grained hornblende + plagioclase ± K-feldspar ± clinopyroxene ± quartz ± biotite ± olivine

Xms — Metasedimentary schist unit
Gray, medium to coarse grained, strongly foliated and lineated, forms steep slopes and high ridges. Dominated by quartz rich psammitic schist with interlayered pelitic schist, mafic gneiss, and ultramafic rocks. Layers are generally between 0.5 m and 10 m thick.

Stipple pattern used to denote area where pelitic schist is abundant.

Key

Fault
Dashed where approximate
dotted where concealed

Contact
Dashed where approximate

21
31
Strike and Dip of foliation and trend and plunge of lineation

Synformal fold axis
Dashed where approximate