Geologic map of the Ramsay Mine Area, Southern Plomosa Mountains, La Paz County, Arizona

By
Stephen M. Richard and Jon E. Spencer
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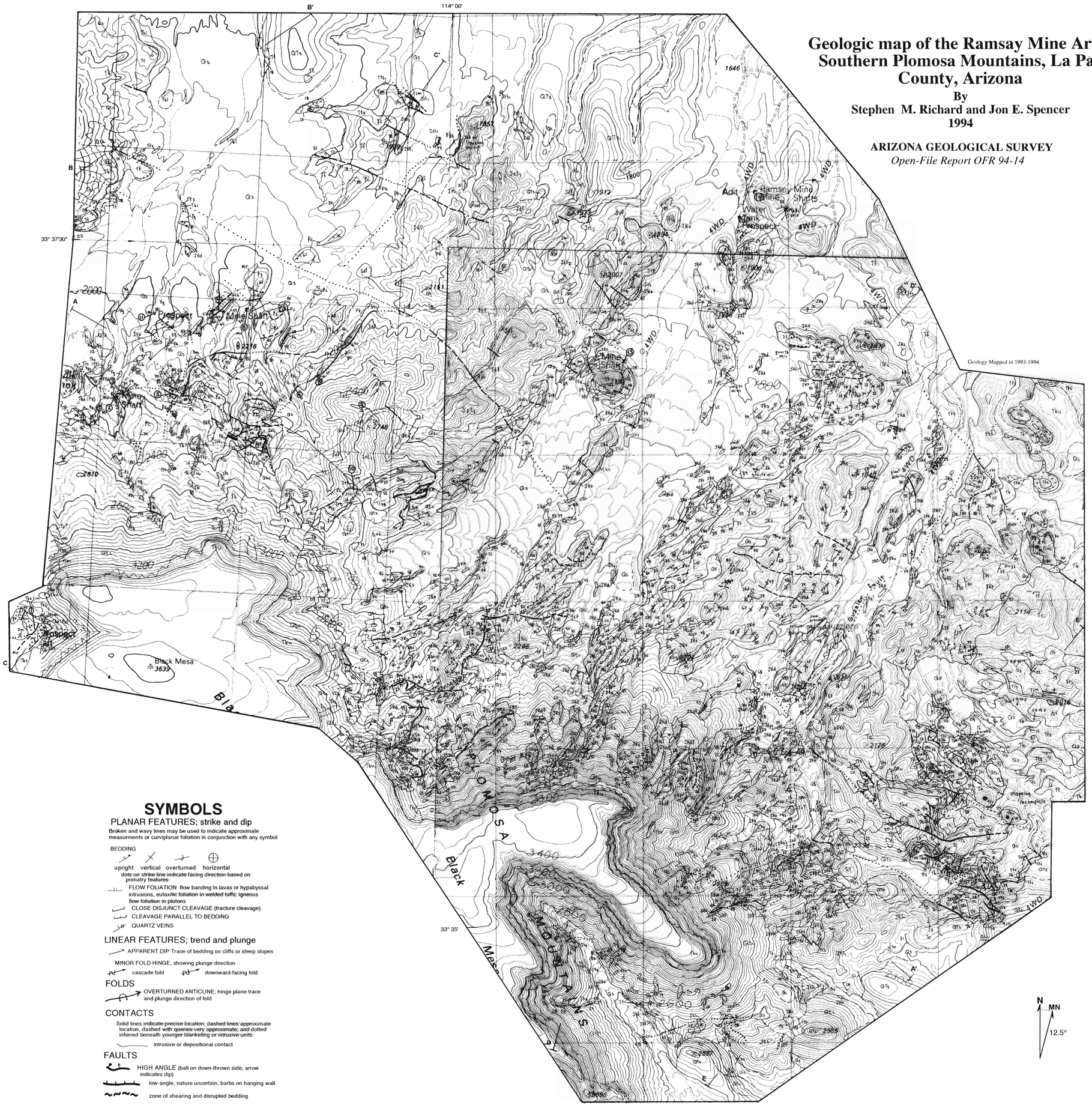


Base from U.S. Geological Survey, 1990 Crystal Hill, Plomosa Pass, Bear Hills and New Water Mountains 1:24,000 topographic quadrangle maps

Universal Transverse Mercator Projection

SCALE 1:12 000

½ ¼ 0 ½ MILE

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0.25 0 0.5 KILOMETER

CONTOUR INTERVAL 20 AND 40 FEET

SYMBOLS

PLANAR FEATURES; strike and dip

Broken and wavy lines may be used to indicate approximate measurments or curviplanar foliation in conjunction with any symbol

BEDDING

upright vertical overturned horizontal

dots on strike line indicate facing direction based on primatry features

FLOW FOLIATION flow banding in lavas or hypabyssal intrusions, eutaxitic foliation in welded tuffs; igneous flow foliation in plutons

CLOSE DISJUNCT CLEAVAGE (fracture cleavage)

CLEAVAGE PARALLEL TO BEDDING

QUARTZ VEINS

LINEAR FEATURES; trend and plunge

APPARENT DIP Trace of bedding on cliffs or steep slopes

MINOR FOLD HINGE, showing plunge direction

cascade fold downward-facing fold

FOLDS

OVERTURNED ANTICLINE; hinge plane trace and plunge direction of fold

CONTACTS

Solid lines indicate precise location; dashed lines approximate location, dashed with queries very approximate; and dotted inferred beneath younger blanketing or intrusive units:

intrusive or depositional contact

FAULTS

HIGH ANGLE (ball on down-thrown side, arrow indicates dip)

low-angle, nature uncertain, barbs on hanging wall

zone of shearing and disrupted bedding

MISCELLANEOUS

Tie line joining regions underlain by same map unit

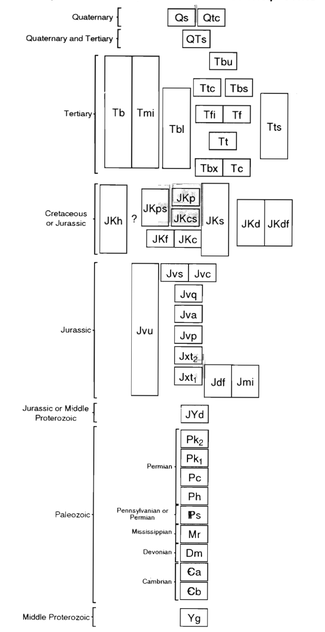
Patterns

karst zone at top of Redwall Limestone

shattered rock

disrupted bedding

Ramsay Mine area, Correlation of Map units



Rock Units

Quaternary

- Qs **Undivided alluvial sediments**
- Qtc **Talus and colluvium**

Quaternary or Tertiary

- QTs **Boulder and cobble conglomerate**

Tertiary

- Tb **Basalt or basaltic andesite**
- Tmi **Intrusive basalt or basaltic andesite**
- mafic dike
- Tbl **Plagioclase-pyroxene basalt**
- Tbs **Basaltic pyroclastic rocks**
- Tbu **Olivine-pyroxene basalt**
- Tc **Conglomerate**
- Tf **Felsite lava**
- Tfi **Intrusive felsite**
- Tt **Welded tuff**
- Ttc **Conglomeratic tuffaceous sediments**
- Tts **Tuff and tuffaceous sediments**
- Tbx **Monolithologic breccia**

Jurassic or Cretaceous

- JKdf **Fragmental mafic rocks**
- JKd **Diorite intrusions**
  - mafic dike
- **Clastic rocks**-- Stratigraphically variable conglomerate, sandstone and mudstone are labeled based on purely lithologic divisions.
  - JKps Argillitic shale
  - JKp Porcellaneous sandstone and argillite; massive to laminated very fine-grained volcanic lithic sandstone
  - JKf very thin bedded, mudstone, siltstone and very fine-grained sandstone, locally with interbedded limestone
  - JKcs Interbedded conglomerate and sandstone
  - JKc Massive conglomerate
  - JKs massive to medium-bedded lithofeldspathic sandstone and conglomeratic sandstone, with variable amounts of interbedded siltstone
  - T-T-T-T tuff marker bed
  - ||-||-||-|| limestone marker bed
  - o o o o o conglomerate marker bed
- JKh **Crystal Hill formation**-- interbedded quartzite cobble conglomerate, quartzite, calcareous quartz arenite, and fine to very-fine grained purple sandstone.

Jurassic

- Jvu **Undivided volcanic rocks**
- Jvc **Volcanic-lithic conglomerate**
- Jvs **Volcanic-lithic sandstone**
- Jmi **Mafic intrusive rocks**
- Jxq **Quartz porphyry**--characterized by round quartz phenocrysts up to 6 mm in diameter
- Jva **Crystal poor tuff**--Nearly aphyric, light creamy grey felsite
- Jvp **Plagioclase porphyry**--Purple-grey plagioclase-phyric intermediate-composition felsite.
- Jxt_2 **Quartz-feldspar porphyry**--2-3 mm diameter crystal rich, fiamme rare, abundant biotite
- Jxt_1 **Quartz-feldspar porphyry**--2-3 mm crystal rich, fiamme common, abundant quartz.
- Jdf **Intermediate Volcanic Rocks**--Includes tuff, lava, volcanic-lithic sandstone and hypabyssal intrusive rocks.

Jurassic or Middle Proterozoic

- JYd **Diorite**

Paleozoic

Permian

- Pk **Kaibab Limestone**
  - Pk_1--tan, sandy, dolomitic limestone
  - Pk_2--grey, cherty limestone
- Pc **Coconino Quartzite**
- Ph **Hermit(?) Formation**--Red-brown fine-grained sandstone

Pennsylvanian or Permian

- Ps **Supai Formation**

Mississippian

- Mr **Redwall Limestone**
  - **karst zone**

Devonian

- Dm **Martin Formation**

Cambrian

- Ca **Abrigo Formation**
- Cb **Bolsa Quartzite**

Middle Proterozoic

- Yg **Monzogranite**