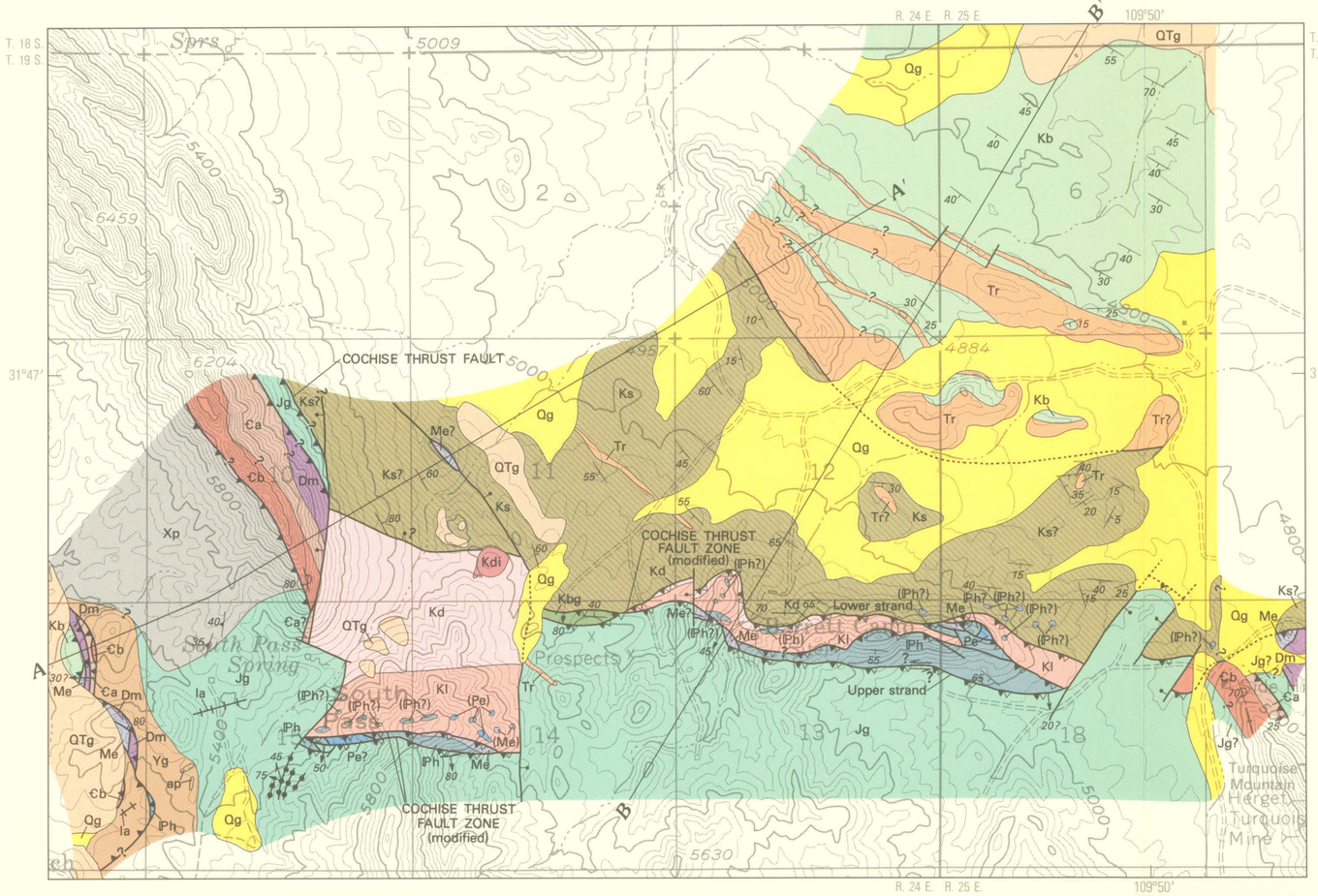
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 1144
PLATE 4



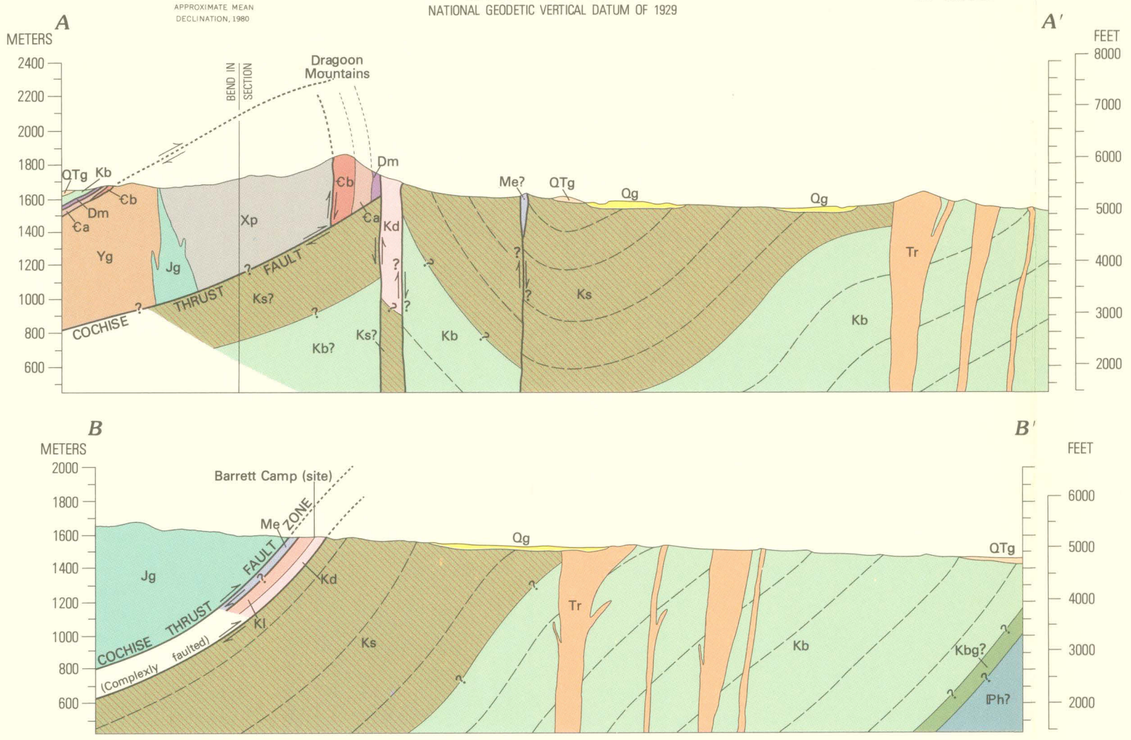
Base from U.S. Geological Survey, 1:62,500
Pearce, 1958

SCALE~1:31 680
1 MILE
1 KILOMETER
CONTOUR INTERVAL 200 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1980

ARIZONA
MAP LOCATION

Geology by Harald Drewes, 1972 and 1975; assisted by G. K. Lee, 1972, and C. H. Thorman, 1975



CORRELATION OF MAP UNITS

Qg	Pleistocene	QUATERNARY
QTg	Pleistocene and Pliocene	QUATERNARY AND TERTIARY
Tr		TERTIARY
Ks	Upper Cretaceous	CRETACEOUS
Kl	Upper Cretaceous	CRETACEOUS
Kdi	Upper Cretaceous	CRETACEOUS
Kd	Upper Cretaceous	CRETACEOUS
Kb	Lower Cretaceous	CRETACEOUS
Kbg	Lower Cretaceous	CRETACEOUS
Jg, la		JURASSIC
Pe	Lower Permian	PERMIAN
ℙh		PENNSYLVANIAN
Me		MISSISSIPPIAN
Dm	Upper Devonian	DEVONIAN
Ꞓa	Upper and Middle Cambrian	CAMBRIAN
Ꞓb	Middle Cambrian	CAMBRIAN
Yg, ap, la	Precambrian Y	PRECAMBRIAN
Xp	Precambrian X	PRECAMBRIAN

DESCRIPTION OF MAP UNITS

Qg GRAVEL AND SAND (PLEISTOCENE)—Alluvium along watercourses and on terraces

QTg GRAVEL (PLEISTOCENE AND PLIOCENE)—Alluvium deposited on pediments and in basins

Tr RHYOLITE (TERTIARY)—Dikes of porphyritic rhyolite

Ks SEDIMENTARY ROCKS (UPPER CRETACEOUS)—Siltstone, sandstone, and conglomerate that contain subangular pebbles and cobbles derived from sandstone and conglomerate of the Bisbee Formation, Gleeson Quartz Monzonite, and volcanic rocks

Kl LATITIC TUFF (UPPER CRETACEOUS)—Indurated, altered, and probably welded tuff. Contains large blocks of Escabrosa and Horquilla Limestones and of Epitaph Dolomite, as parenthetically marked

DACITIC ROCKS (UPPER CRETACEOUS):

Kdi Intrusive dacitic porphyry

Kd Volcanic dacite and dacite breccia

BISBEE FORMATION (LOWER CRETACEOUS):

Kb Siltstone, shale, and sandstone—Feldspathic light-reddish-gray siltstone, and dark-gray shale, 90 percent; light-brownish-gray, feldspathic, crossbedded sandstone with some lentils of small round-pebble conglomerate, 9 percent; and intercalated fine-grained limestone and limestone-nodule beds, together about 1 percent

Kbg Glance Conglomerate Member—Limestone cobble conglomerate

Jg GLEESON QUARTZ MONZONITE (JURASSIC)—Coarse-grained biotite quartz monzonite and granodiorite; radiometrically dated as 178 and 185 m.y. Includes some small bodies of granitoid rock near the Herget Turquoise Mine that Gilluly (1956) mapped as Copper Belle Monzonite Porphyry and Turquoise Granite and as older than the Gleeson Quartz Monzonite

la Lamprophyre dike

Pe EPITAPH DOLOMITE (LOWER PERMIAN)—Dark-gray, coarse-grained dolomite; occurs only as large blocks in latitic tuff, unit Kl

ℙh HORQUILLA LIMESTONE (PENNSYLVANIAN)—Light-gray, fine-grained, thin-bedded, cherty limestone

Me ESCABROSA LIMESTONE (MISSISSIPPIAN)—Dark-gray, coarse-grained, thick-bedded, cherty, crinoidal limestone

Dm MARTIN FORMATION (UPPER DEVONIAN)—Limestone, brown dolomite, and sandstone

Ꞓa ABRIGO FORMATION (UPPER AND MIDDLE CAMBRIAN)—Shale, sandstone, and thin-bedded limestone

Ꞓb BOLSA QUARTZITE (MIDDLE CAMBRIAN)—Light-gray to brownish-gray, thick-bedded, coarse-grained quartzite

Yg GRANODIORITE PORPHYRY (PRECAMBRIAN Y)—Coarse-grained biotite granodiorite porphyry

ap Aplite

la Lamprophyre dike

Xp PINAL SCHIST (PRECAMBRIAN X)—Phyllite, schist, and metagraywacke

CONTACT—Dotted where concealed

NORMAL FAULT—Dotted where concealed. Bar and ball on downthrown side

30 THRUST FAULT—Showing dip. Sawteeth on upper plate

45 COMPLEX FAULT—Showing dip. Sawteeth on upper plate. Inferred to have moved first as part of a thrust fault and then as a glide fault

FAULT ON CROSS SECTION—Arrow couple shows relative movement. Queried where basis for projection is lacking

75 45 QUARTZ VEIN—Showing dip. Half-arrow shows plunge of slickensides

STRIKE AND DIP OF BEDS

15 Inclined

Vertical

80 Overturned

GEOLOGIC MAP AND STRUCTURE SECTIONS OF PART OF THE SOUTHERN DRAGOON MOUNTAINS BETWEEN SOUTH PASS AND TURQUOISE MOUNTAIN, ARIZONA