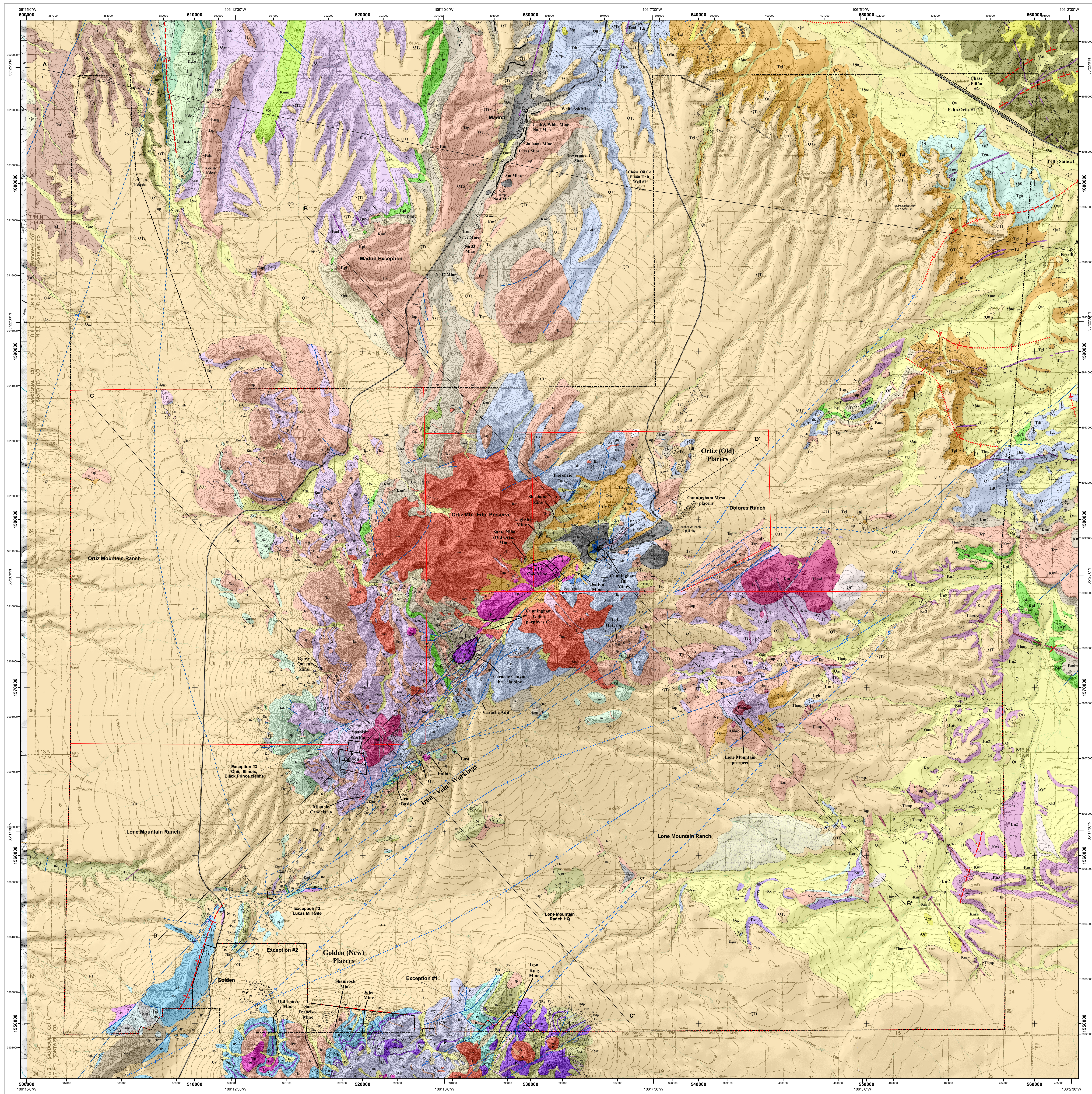




GEOLOGIC MAP OF THE ORTIZ MINE GRANT SANTA FE COUNTY, NEW MEXICO

1:24,000

EXPLANATION

— Cross section trace

— Ortiz Mine Grant boundary

— Surface ownership

Mines, prospects, wells

× Placer pit

× Mine

• Shaft

◊ Oil test well

— Adit

× Prospect pit

Structural Point Symbols

— Bedding

— Bedding overturned

— Bedding vertical

— Dike contact dip

— Fault plane

— Foliation

— Joint

— Joint vertical

— Mineral lincation

Structural Line Symbols

— Mineralized shear or vein

— Coal seam

— Collapse breccia pipe contact

••• Conglomerate bed

— Contact anthropogenic deposit

— Contact approximately located

— Contact approximately located, concealed

— Contact approximately located, queried

••• Contact gradational

— Contact gradational, concealed

— Contact unconsolidated unit

— Fault approximately located

— Fault approximately located, concealed

— Fault approximately located, concealed, queried

— Fault approximately located, queried

— Limbargite dike

— Mine cut

— Trace of antiform axis

— Trace of antiform axis, concealed

— Trace of monoclinial bend

— Trace of synclinal axis

— Trace of synclinal axis, concealed

GEOLOGIC UNITS

Quaternary-Tertiary unconsolidated units

— Anthropogenic deposit

— Qc - Eolian deposits

— Qf - Alluvial fan

— Qa - Active alluvium

— Qt - Alluvial terrace, Galisteo Creek; Qrt - Alluvial terrace on tributaries

— Qp - Pediment deposit

— Qce - Alluvium and colluvium, undivided

— Qcl - Colluvium and talus

— Qcfs - Older colluvium & fan deposits

— QT1 - Tertiary Gravel - conglomerate derived from Ortiz and San Pedro Mountains

— QTA - Ancha Formation - conglomerate derived from Sangre de Cristo Mountains

— TsF - Santa Fe Group - Rio Grande Rift basin fill

Mid-Tertiary, Oligocene intrusive units

— Ti - Intrusive (undifferentiated)

— Tbp - Hornblende porphyry

— Tbp - Hornblende-feldspar porphyry

— Tmd - Mafic dikes

— Tmp - Hornblende porphyry monzonite dikes

— Tlt - Trachytic latite - syn- & post-mineral dikes

— Tl - Latite - syn- & post-mineral dikes

— Tmp - pink monzonite porphyry, Iron Vein area

— Tlp - Latite porphyry - subvolcanic intrusives in Ortiz Mountains

— Tba - Hornblende andesite dikes

— Tmpd - Quartz monzonite stocks in southwestern and eastern parts of Ortiz Mountains

— Tam - Andesite monzonite - central stock of Ortiz Mountains

— Tr - Rhyolite intrusive - sills and dikes, San Pedro Mountains

— Tdp - Andesite porphyry, Tep - Mesa de las Cabezas porphyry, laccoliths and sills throughout Ortiz Porphyry Belt

Mid-Tertiary, Oligocene breccias and volcanic units

— Tcb - Carache Canyon collapse breccia

— Tbp - Quartzite breccia (Cunningham Hill area & Florence prospect)

— Tsp - Espinosa Volcanics - pyroclastics, volcaniclastic sediments

— Tdv - Dolores Gulch volcanics, vent breccia, pyroclastics, minor volcaniclastic sediments

Tertiary Period - Paleocene and Eocene Epochs

— Tgu - Upper Galisteo Fm - sandstone

— Tgl - Lower Galisteo Fm - redbeds, mudstone, minor sandstone & conglomerate

— Tdt - Diamond Tail Fm - sandstone

Cretaceous Period

— Kmh - Harmon Sandstone

— Km - Menefee Formation - shale, sandstone, coal

— Kpl - Point Lookout Sandstone

— Km - Mancos Shale, undivided

— Kns - Niobrara Member - sandstone

— Kn - Niobrara Member - shale

— Knj - Juanes Lopez Member - limestone

— Kc - Carlisle Member - shale

— Kmgh - Greenhorn Member - limestone

— Kd - Dakota Formation, undivided

— Kdc - Dakota Formation, Cubero Member - sandstone

— Kdsh - Dakota Formation, Oak Canyon Member - shale

— Kdss - Dakota Formation, Oak Canyon Member - sandstone

Jurassic Period

— Jm - Morrison Formation

— Jmj - Morrison Formation, Jackpile Member - sandstone

— Jmb - Morrison Formation, Brushy Basin Mbr - mudstone

— Jms - Morrison Formation, Salt Wash Member - sandstone

— Js - Summerville Formation - sandstone

— Jt - Todillo Formation - lacustrine evaporite and limestone

— Je - Entrada Formation - scollan sandstone

Triassic Period

— TRc - Chinle Formation - redbed mudstone, sandstone; TRca - Agua Zarca sandstone Member

— TRm - Moenkops Formation

Permian Period

— Psa - San Andres Limestone

— Pg - Ghorlita Sandstone

— Py - Yezo Formation - redbed siltstone, shale

— Pa - Abo Formation - redbed mudstone and sandstone

— Pay - Abo Yozo Fms undivided

Pennsylvanian Period

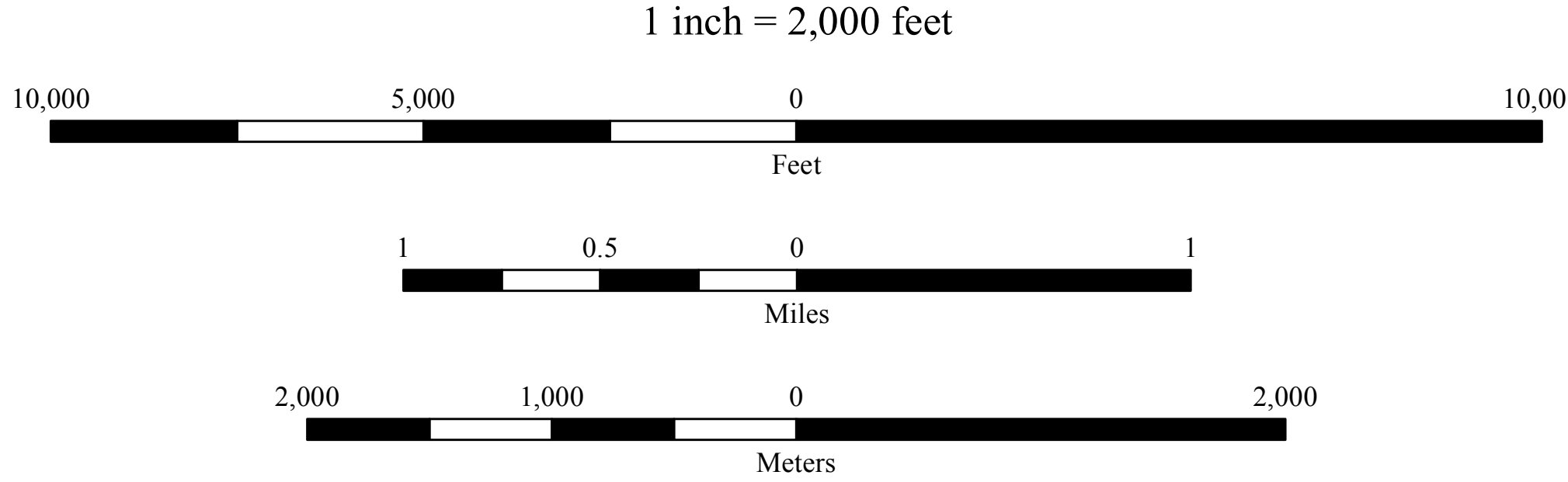
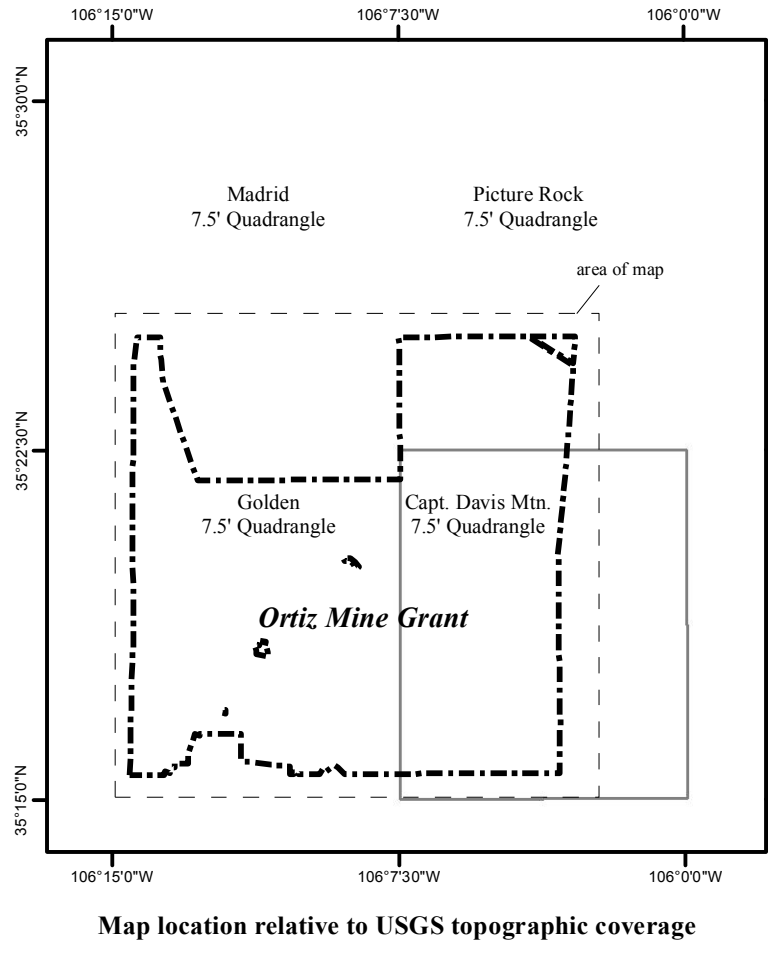
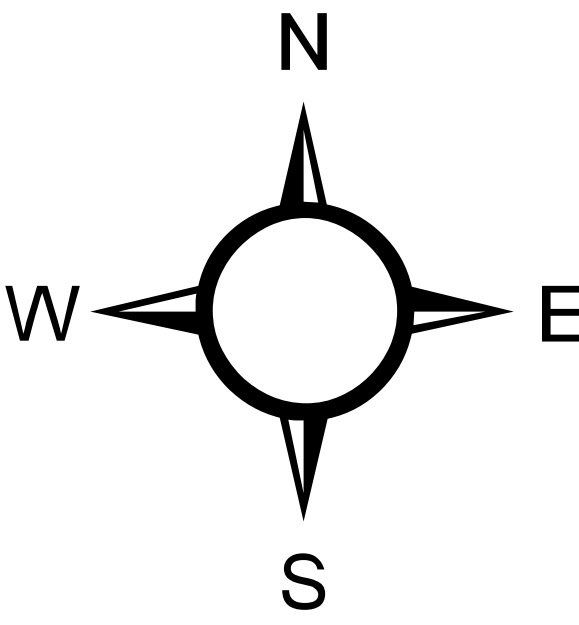
— Ipa - Madera Formation - limestone, shale

— Ips - Sandia Formation - sandstone, shale

PROTEROZOIC ERA

— Xms - Metasediments

— Xmq - Quartzite



Datum: New Mexico State Plane Coordinate System, Central Zone.
Metric grid on topographic base map is NAD27 datum, Zone 13N.
Topographic base from Golden, Captain Davis Mountain, Madrid,
and Picture Rock 7.5-minute quadrangles.

Geologic mapping by S.R. Maynard and others, 1986-2001. Compilation by S.R. Maynard, 1986-2012.