

PLATES

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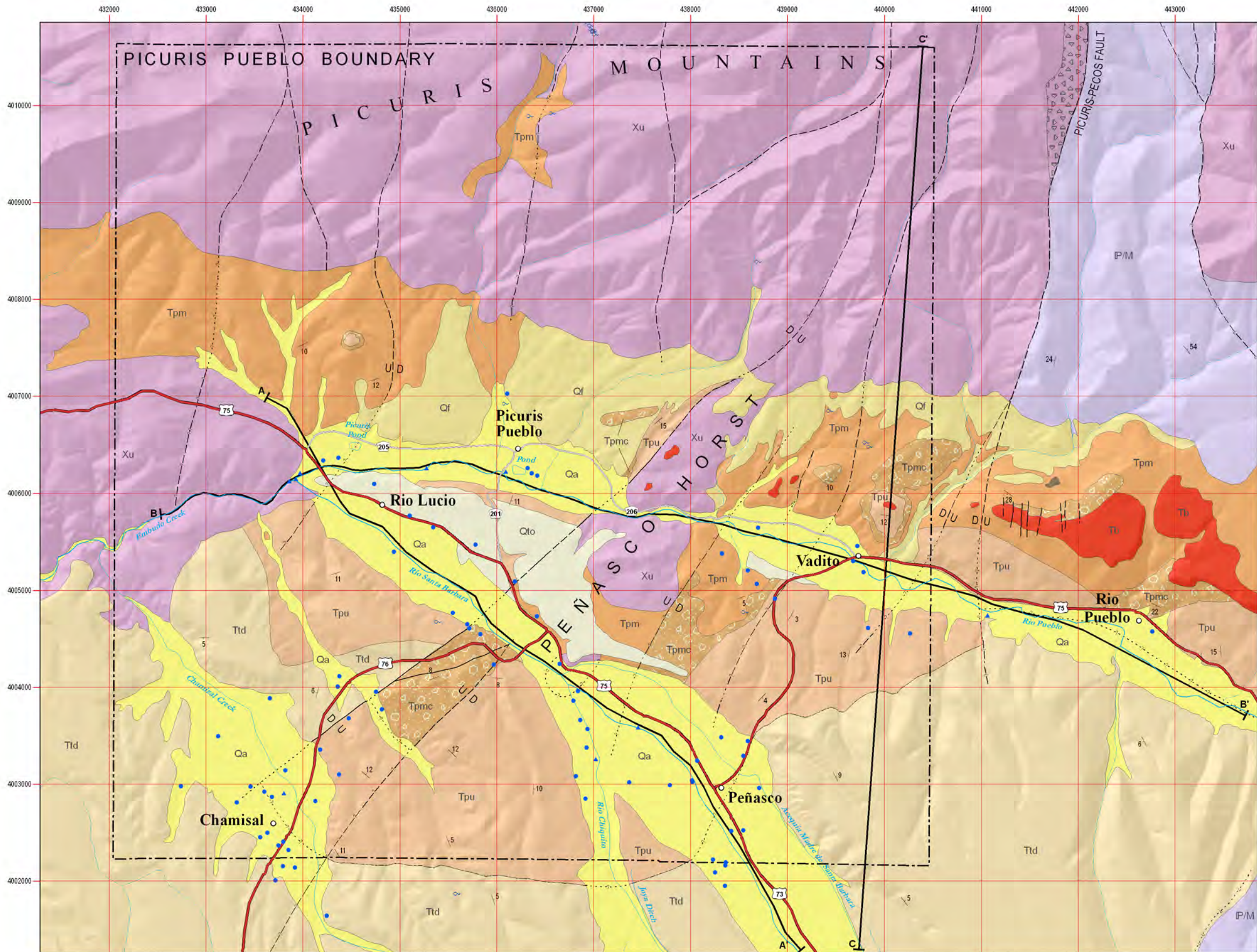
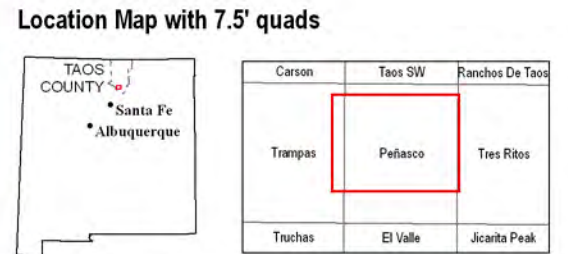


Plate 1—Generalized Geologic Map of Part of the Peñasco 7.5-minute Quadrangle Taos County, New Mexico
(with select Quaternary units not shown)

Modified from Geology of the Peñasco 7.5-minute Quadrangle Taos County, New Mexico by Bauer and others (2005)

Geologic Units		Map Symbols	
	Qa Alluvium		Contact
	Qf Alluvial fans		Gradational contact
	Qto Older alluvium		Fault, certain, with sense of movement
	Tb Basalt		Fault, approximate, with sense of movement
	Ttd Dixon mbr of Tesuque Fm		Fault, queried
	Tpu Upper mbr of Picuris Fm		Fault, concealed
	Tpmc Middle cemented mbr of Picuris Fm		Fault, concealed, queried
	Tpm Middle mbr of Picuris Fm		Strike/dip angle
	Tpl Lower mbr of Picuris Fm		Cross section line
	IP/M Paleozoic sedimentary rocks	Well and Data Inventory	
	Xu Precambrian rocks		Spring location
	Xub Breccia of Precambrian rocks		Stream sample site
			Well location



Base from U.S. Geological Survey 7.5-minute topographic maps 1983 North American datum, Universal Transverse Mercator Projection 1000-meter UTM grid tics, zone 13, shown in red

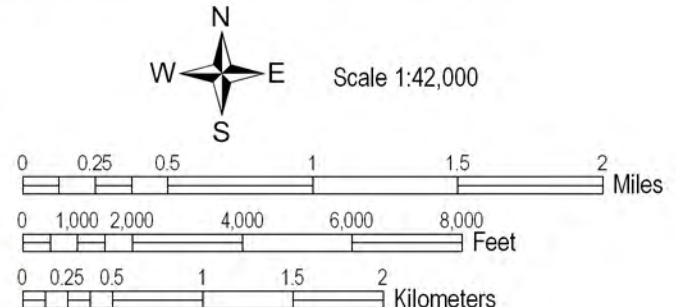


Plate 2a—Geologic Cross Section A-A' along the Rio Santa Barbara, Taos County

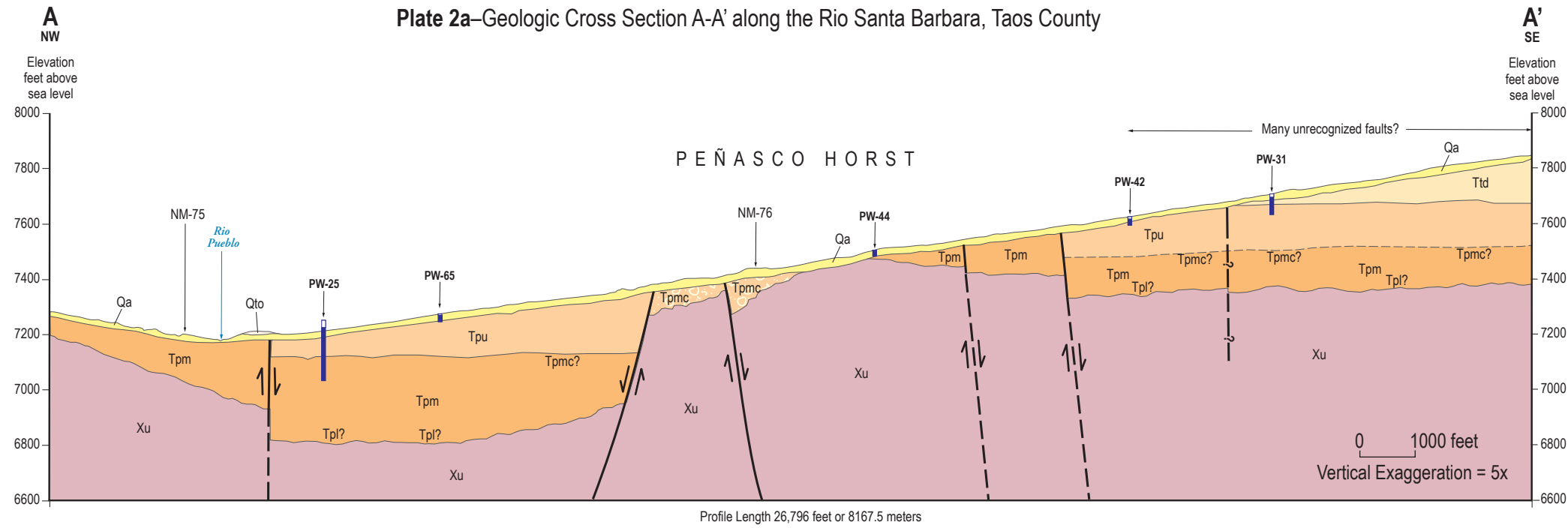


Plate 2a and 2b—Generalized Geologic Cross Sections, Picuris Pueblo

Geologic Units

Qa	Alluvium
Qf	Alluvial fans
Qto	Alluvial fans Older alluvium
Tb	Basalt
Ttd	Dixon mbr of Tesuque Fm
Tpu	Upper mbr of Picuris Fm
Tpmc	Middle cemented mbr of Picuris Fm
Tpm	Middle mbr of Picuris Fm
Tpl	Lower mbr of Picuris Fm
IP/M	Paleozoic sedimentary rocks
Xu	Precambrian rock

Map Symbols

	Fault, <i>certain</i> , with sense of movement
	Fault, <i>approximate</i> , with sense of movement
	Fault, <i>concealed</i> , queried
	Well, with water level projected to cross section

Plate 2b—Geologic Cross Section B-B' along the Rio Pueblo, Taos County

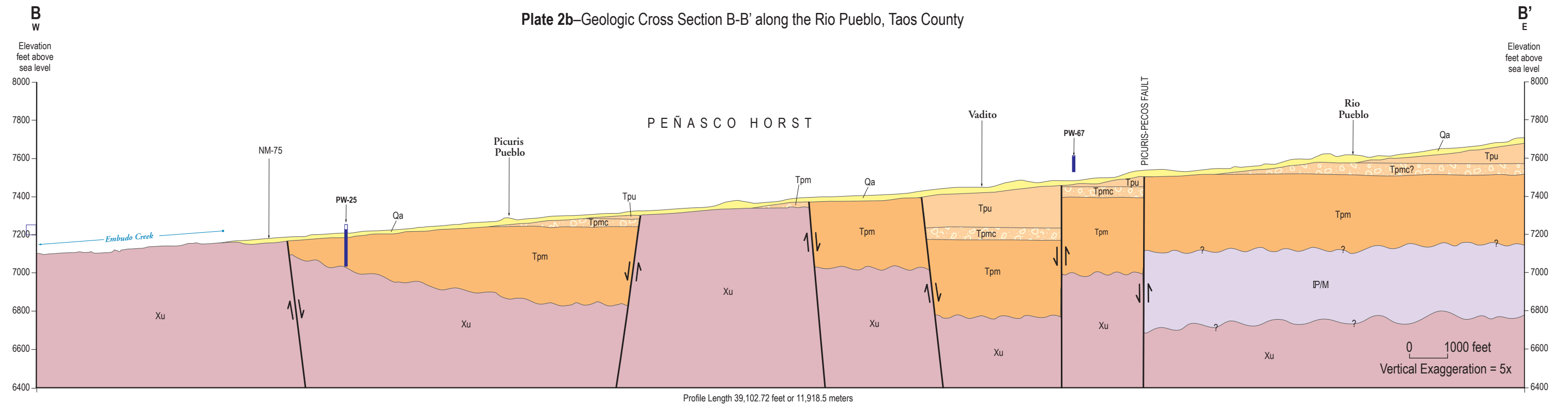
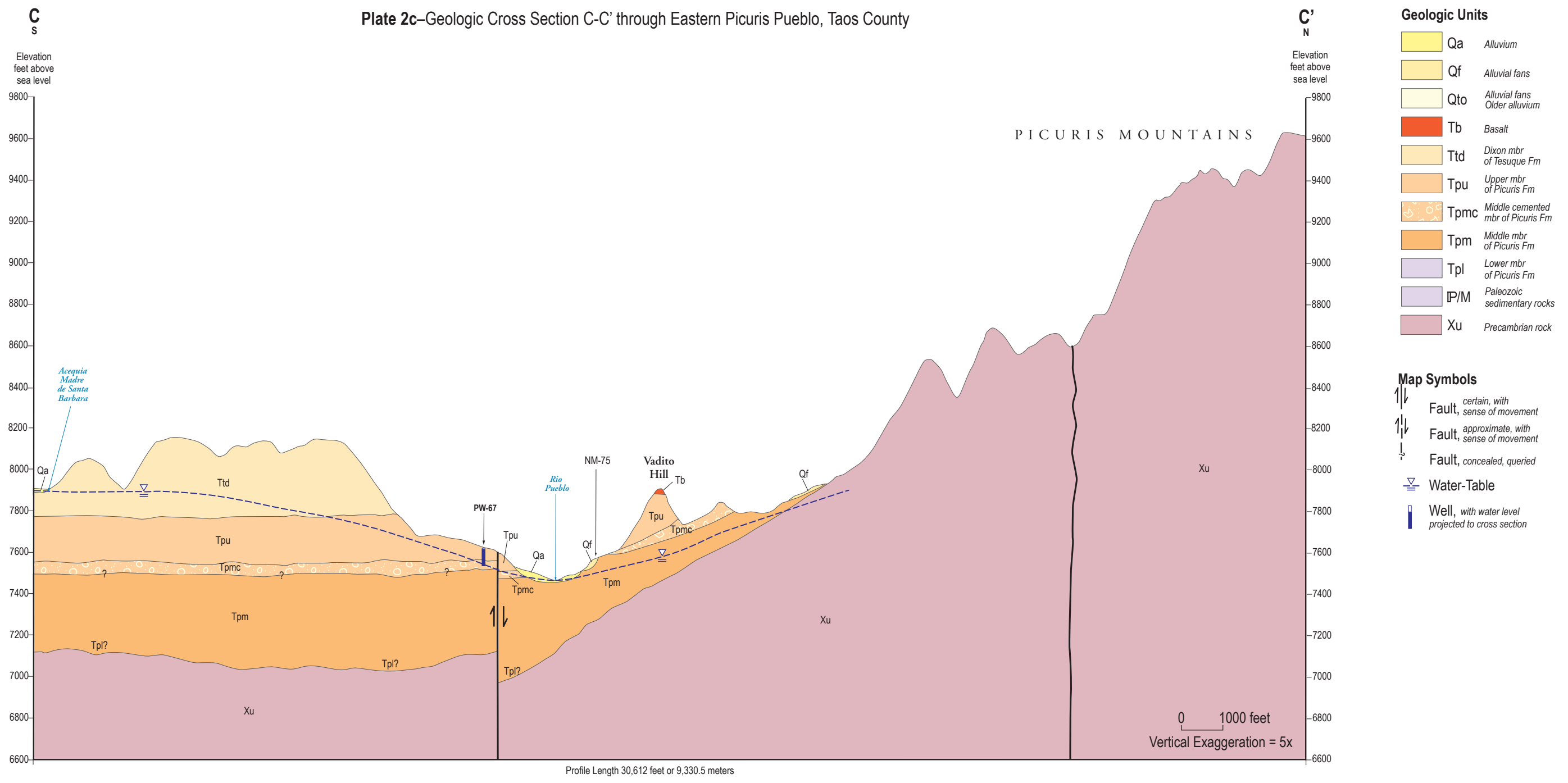


Plate 2c—Generalized Geologic Cross Sections,
Picuris Pueblo

Plate 2c—Geologic Cross Section C-C' through Eastern Picuris Pueblo, Taos County



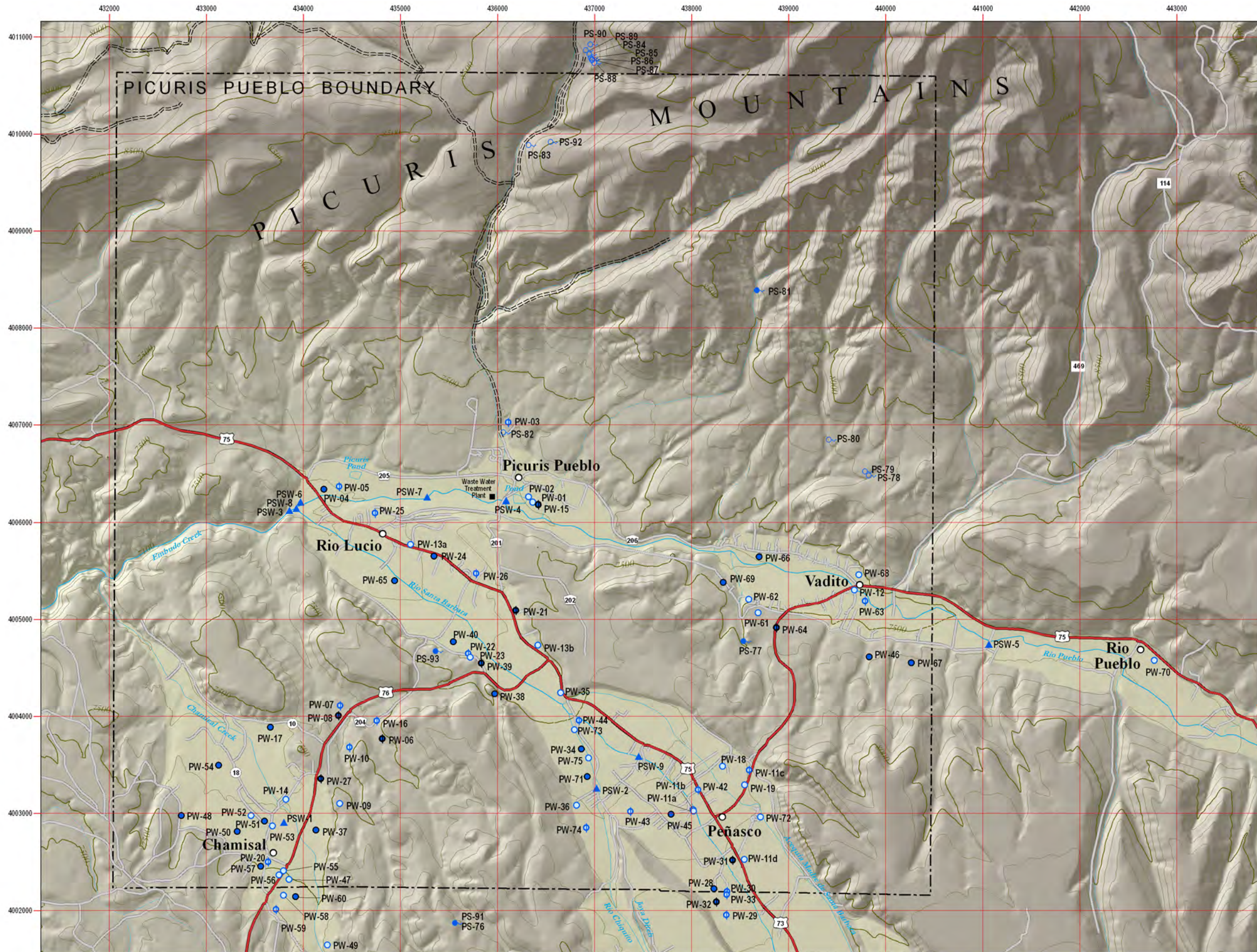
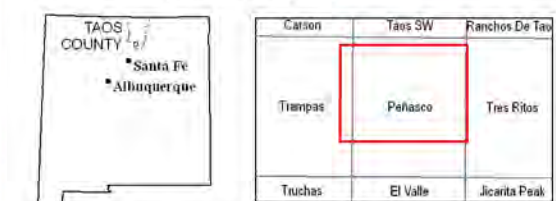


Plate 3—Well and Data Inventory Map

Map Symbols

- Well
- Well with water level data
- Well with chemistry data
- Well with water level and chemistry data
- Spring
- Spring with chemistry data
- Stream sample site
- PW-12 Site ID

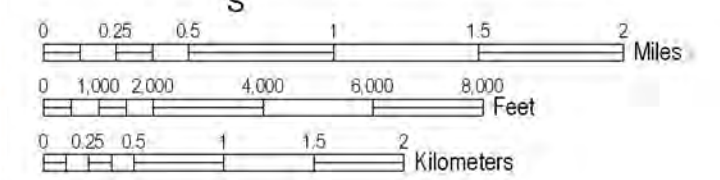
Location Map with 7.5' quads



Base from U.S. Geological Survey 7.5-minute topographic maps 1983 North American datum, Universal Transverse Mercator Projection 1000-meter UTM grid tics, zone 13, shown in red



Scale 1:42,000
Contour Interval 100 feet



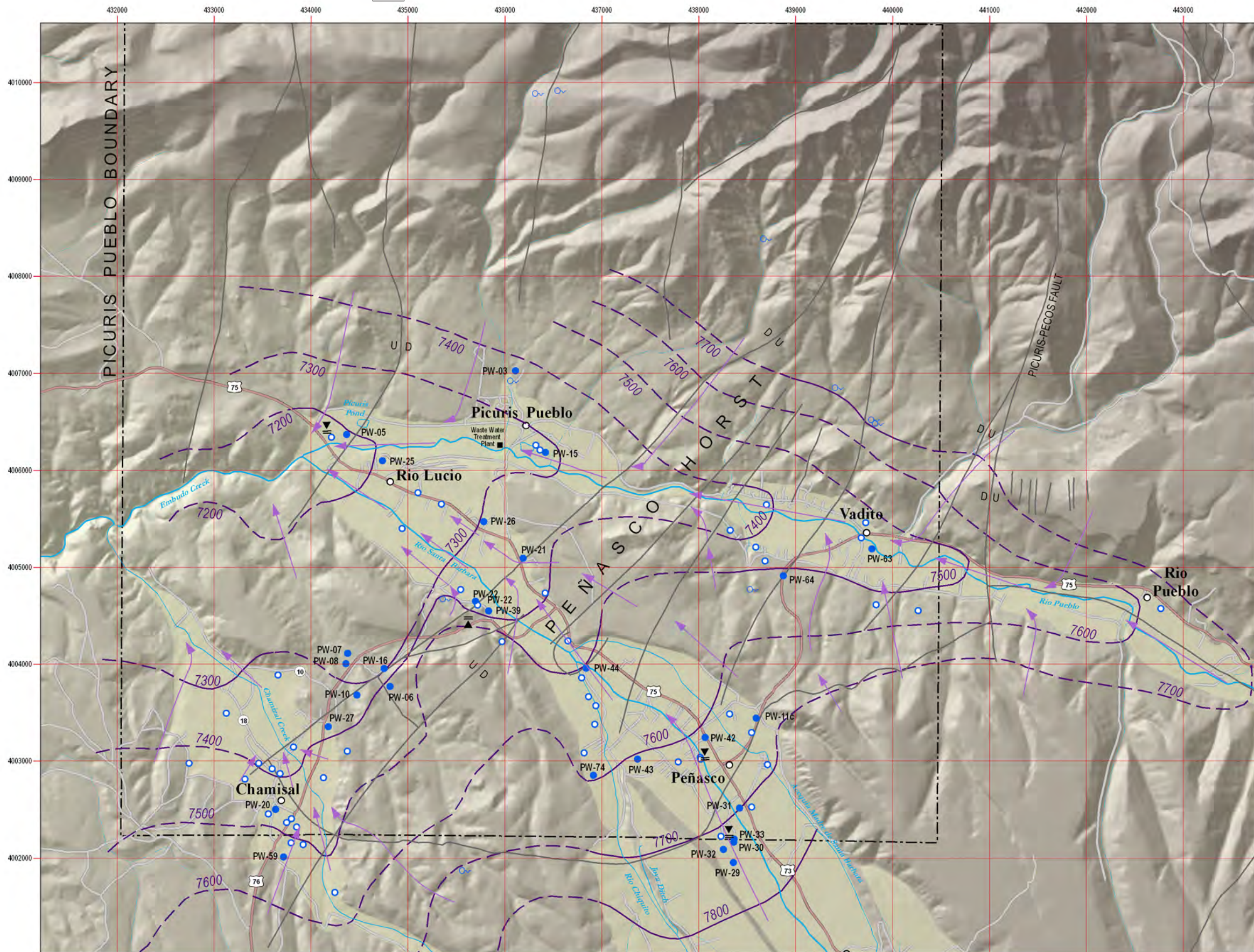
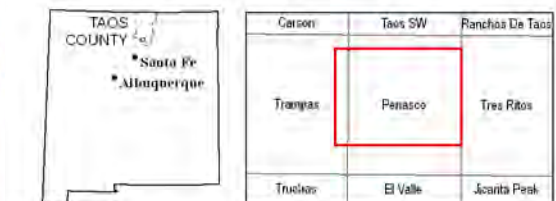


Plate 4—Water-Table Surface Map

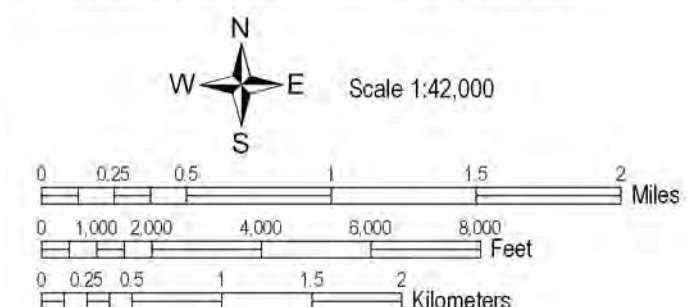
Map Symbols

- Contour of water-level elevation, dashed where approximate. Datum is sea level
Contour Interval 100 feet
- Direction of horizontal groundwater flow
- Area of downward vertical gradient
- Area of upward vertical gradient
- PW-12 Well with water level measured by NMBGMR
- Well with water level reported
- Spring with elevation from 10-m DEM
- Faults, with sense of movement

Location Map with 7.5' quads



Base from U.S. Geological Survey 7.5-minute topographic maps 1983 North American datum, Universal Transverse Mercator Projection 1000-meter UTM grid ties, zone 13, shown in red



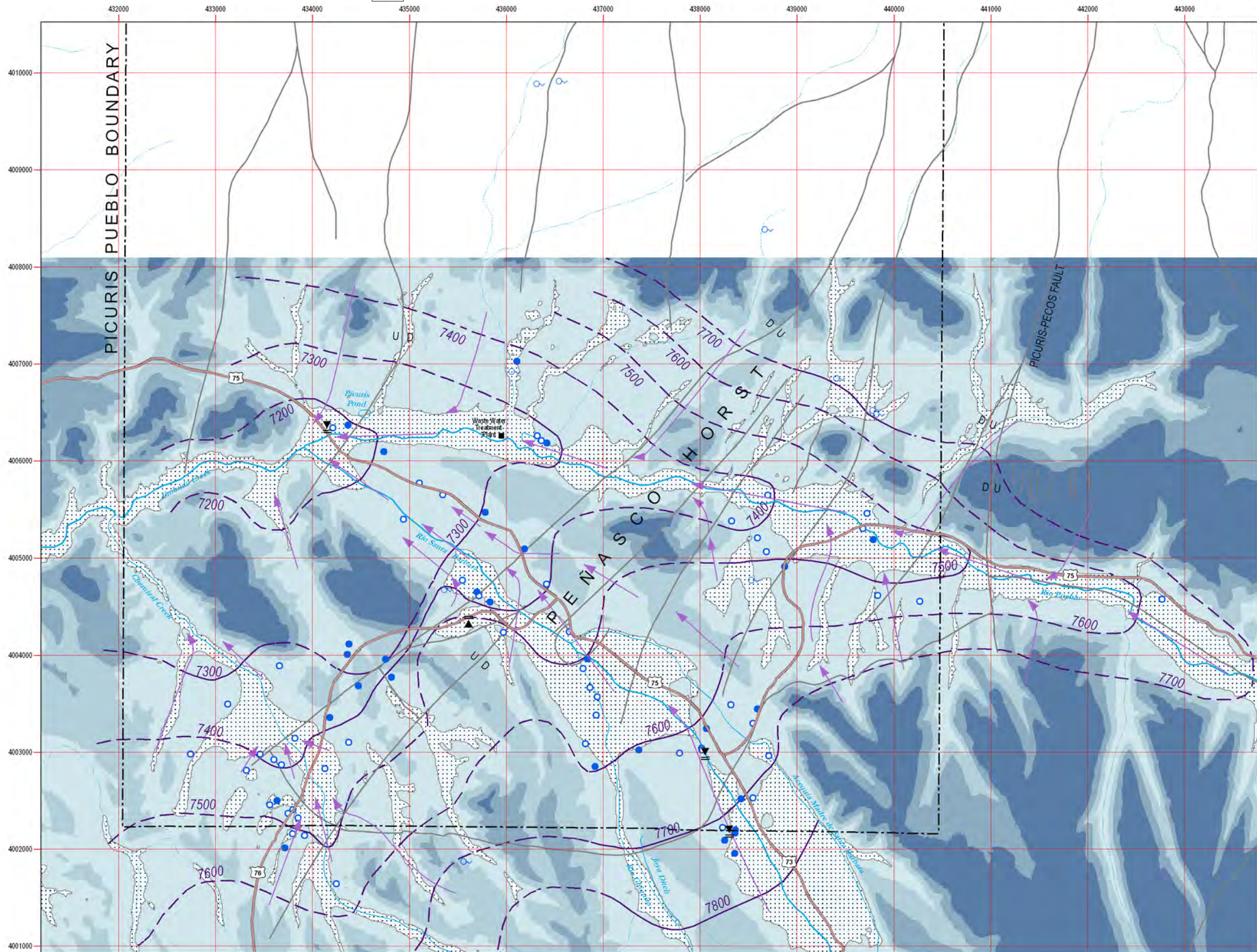
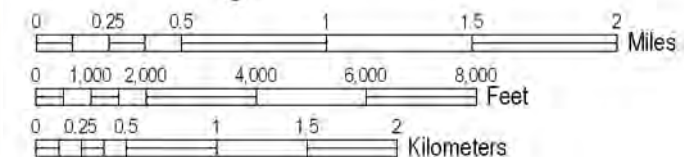
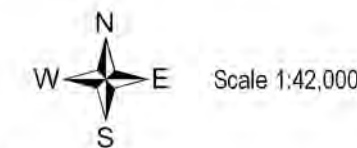


Plate 5-Depth to Water Map

Map Symbols

- Contour of water-level elevation, dashed where approximate. Datum is sea level
Contour Interval 100 feet
- ▨ Depth to Groundwater ≤ 20 feet
- -20 to -100 feet
- -100 to -175 feet
- -175 to -250 feet
- >250 feet
- Direction of horizontal groundwater flow
- ▼ Area of downward vertical gradient
- ▲ Area of upward vertical gradient
- Well with water level measured by NMBGMR
- Well with water level reported
- Spring with elevation from 10-m DEM
- /— Faults, with sense of movement



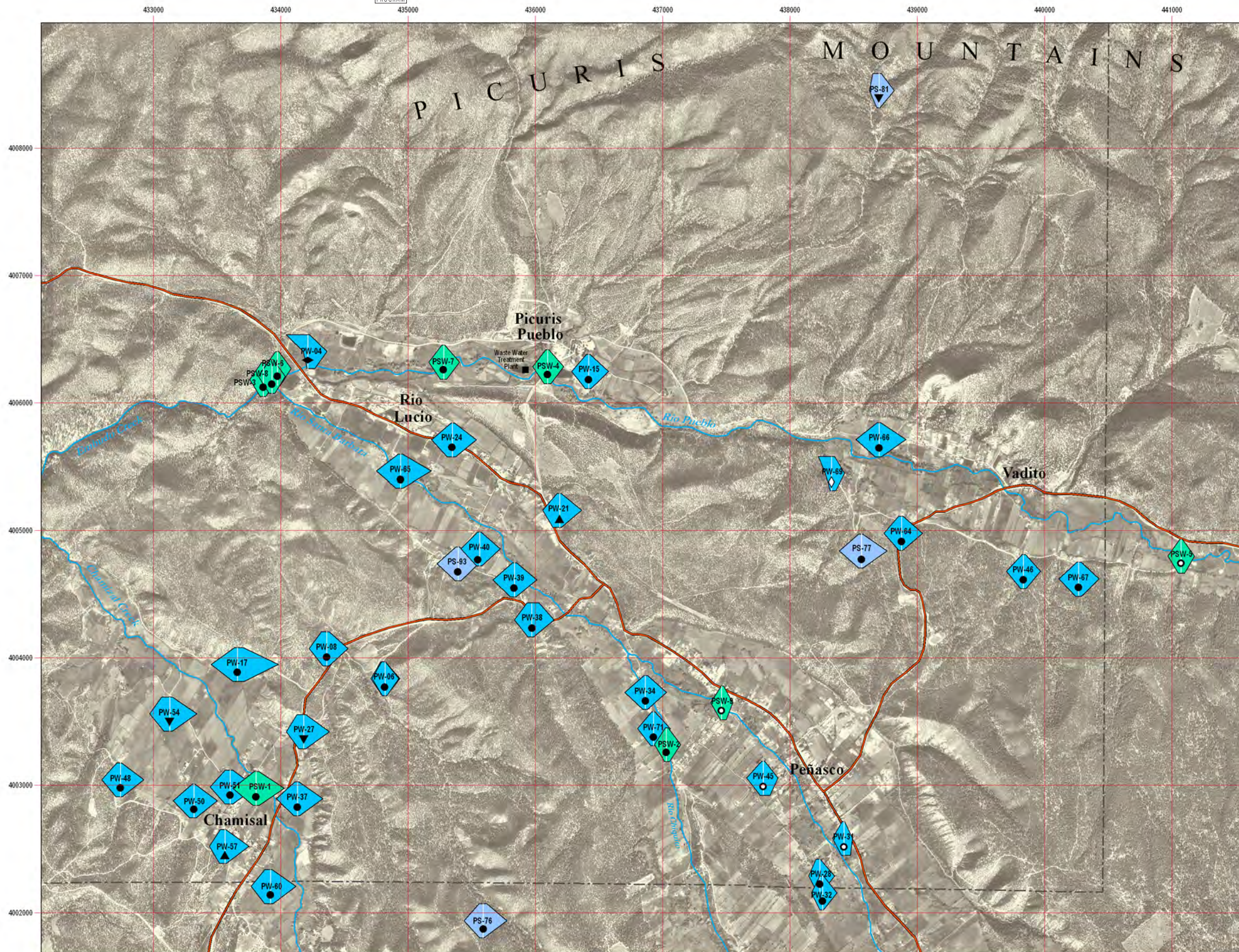
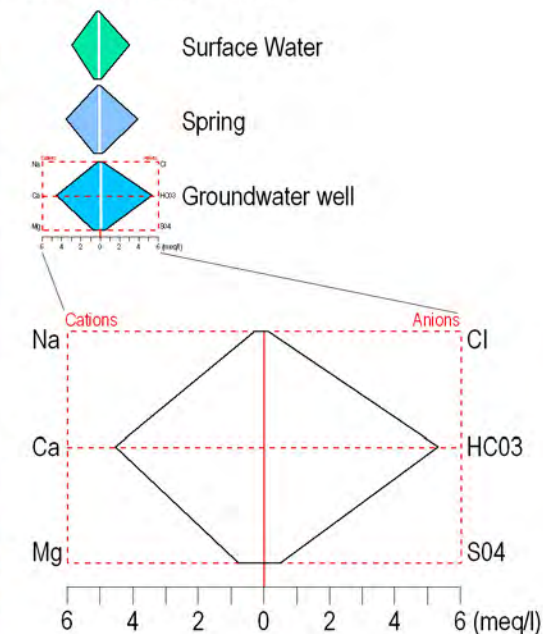


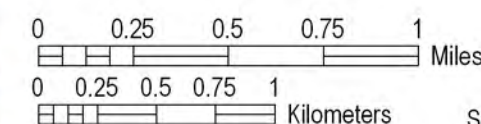
Plate 6—Relative Abundance of Major Ions and Stiff Diagrams

Stiff Diagram (to scale)



Water Type

- PW-80 Site ID
- Ca-HCO₃
- Ca-HCO₃-SO₄
- ▲ Ca-Mg-HCO₃
- ▼ Ca-Na-HCO₃
- ◇ Na-Ca-HCO₃
- ◄ Na-HCO₃-SO₄



Scale 1:32,000