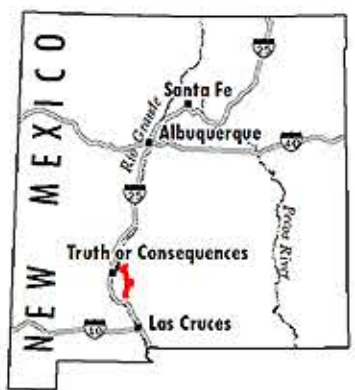


NEW MEXICO BUREAU OF GEOLOGY
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Landforms of the Central Jornada del Muerto: Influencing the Path of El Camino Real de Tierra Adentro

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Comments to Map Users

This map is presented as a classification and mapping of landforms in close proximity to the route of El Camino Real de Tierra Adentro (El Camino Real) as it crosses the Jornada del Muerto region in south central New Mexico. These landforms potentially have implications for paleo-hydrologic conditions in the past. El Camino Real is a 1,600 mile long trail linking Mexico City and San Juan Pueblo/Ohkay Owingeh, New Mexico, which was in use from 1598 to the 1940's. The Jornada del Muerto, was reportedly one of the most feared sections along El Camino Real due, primarily, to the scarcity of water. It is thought that water availability largely influenced the travel route and locations of parajes (campsites) in the Jornada del Muerto. This project was conducted by the New Mexico Bureau of Geology and Mineral Resources (NMBGMR) for Spaceport America.

Twenty four distinct landforms are presented on the map, including three broad bedrock surfaces, two volcanic surfaces, five playa and lunette surfaces, five alluvial surfaces, six piedmont surfaces, and three fan skirt surfaces. Individual landform surfaces were delineated based on a comparison of geologic map units defined by previous researchers, air photographs, and field investigations. Subdivisions present within the geologic map units were, in most instances, merged to form more generalized landform surfaces. Large piedmont surfaces, common in the southern portion of the study area, were often broken into an uplope "Piedmont" component and a distal "Fan Skirt" component. As such, the landform surfaces presented on the map are interpretations of the authors.

24K Quad Index Map

Engle	Shannon Canyon NW
Cutter	Potterat Tank
Upland	Prisor Hill
Alivio	Upland Hills

Landform Units

(young above old)

Post-bedrock units of greater Jornada Draw

Alluvial units

- Qa Axial stream floodplain and channels
- Qap Tributary valley inset alluvium
- Qp2 Old fan skirt
- Qp3 Old piedmont
- Qp4 Palomas fan skirt
- Qp1a Palomas piedmont
- Qp1b Camp Rice piedmont
- Qm1 La Mesa surface

Playa units

- Ql Playa
- Qlf Floodplain playa
- Qla Intermediate playa alluvium fill
- Qlo Old playa alluvium fill
- Qle Playa lunette

Post-bedrock units of McRae-Ojo del Muerto drainages

- Qva Valley fill alluvium
- Qvo Valley margin alluvium

Piedmont alluvial units

- Ql3 Intermediate fan skirt
- Qp3 Intermediate inset piedmont
- Qp2 Old fan skirt
- Qp1 Old piedmont
- Qp1a Palomas fan skirt
- Qp1b Camp Rice piedmont
- Qm1 La Mesa surface

Bedrock units

- Tb Volcanic edifice
- Ti Basalt dike
- Rtv Tertiary volcanic bedrock
- Rts Tertiary sedimentary bedrock
- Rks Cretaceous sedimentary bedrock

Post-bedrock units

Alluvium

- Qva
- Qa
- Qap
- Qvo

Playa

- Qlf
- Ql
- Qle
- Qla
- Qlo

Bedrock units

- Tb
- Ti
- Rtv
- Rts
- Rks

Playa

- Qlf
- Ql
- Qle
- Qla
- Qlo

Piedmont

- Qp4
- Qp3
- Qp3i
- Qp2
- Qp1
- Qp1a
- Qp1b
- Qm1

Bedrock units

- Op1a
- Op1b
- Qr1

Map Explanation

- Fault, exposed
- - - Fault, intermittent/obscured
- Fault, inferred
- Fault, concealed
- Bar-and-ball on down-thrown side
- Contact
- El Camino Real (approx. location)
- Spaceport America
- 24K quadrangles
- Settlement
- Paved road
- Gravel road
- Unimproved road
- Drainage