

Welcome to Earth Matters, field notes on the geology of New Mexico's enchanting landscapes. Celebrating Earth Science Week, I'm Trevor Kludt.

Along the ancient *El Camino Real*, the most infamous stretch was the dreaded *Jornada del Muerto*, a name often interpreted as the 'journey of the dead'. In this 65 mile reach, the trail veered away from the Rio Grande onto the dry deserts of central New Mexico. Large caravans with thousands of people and animals routinely crossed this area. Where did they get their water?

To answer this question, New Mexico scientists undertook a study of water within the *Jornada*. We identified three primary water sources, a large perennial spring, a cluster of playas or dry lake beds, and a series of intermittent seeps or shallow springs. From our geologic, hydrologic, geochemical and historical analyses, it appears that the large perennial spring, the *Ojo del Muerto*, was the key to travel across the *Jornada*. As in years past, today this spring is reliable and produces ample amounts of good quality water, even during periods of drought.

This important water sources lies near the midpoint in the *Jornada* crossing and travelers who reach it were guaranteed to find water, enabling them to finish the remainder of the crossing.

The limited number of water holes in the *Jornada* may have been a hardship, but it was a hardship routinely overcome. Considering that the major spring is named the '*Ojo del Muerto*', perhaps the name *Jornada del Muerto* refers to a journey to the *del Muerto* spring rather than a more sensational and sinister 'journey of the dead'.

Celebrating Earth Science Week, I'm Trevor Kludt with the New Mexico Bureau of
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