The Story of Moving Mountain. An Historic Gas Seepage and Mass Wasting Event

Paul Oldaker

Hydrogeologist, Steamboat Springs, CO.

In 1881, the construction of the narrow gauge railroad to Durango, Colorado uncovered thick coal seams in an area which came to be known as Carbon Junction and Carbon Mountain. These seams were later classified as part of the Fruitland Formation. In 1888, Professor Arthur Lakes of the Colorado School of Mines observed gas seeps associated with these coal seams in the same area. In June 1932, the entire town of Durango was rocked by an unknown nighttime explosion. In the morning no cause or damage could be found. In December 1932, explosions rocked the town and the north side of Carbon Mountain where landslides to the north are observed. Newspaper headlines said that the mountain is moving south of Durango and this feature's name was shortened to "Moving Mountain". Many theories have been put forward regarding the nature and cause of the movement. The explosions continued until as late as March 1933. The town tried to advertise it as a tourist attraction. The north "landslides" ejected coal into Tortilla Flats (now Bodo Park). At least one person was taken for a ride down these landslides. The east landslide developed along strike toward the east and the Animas River. No north landslides have occurred since 1933.

The east landslides continue to the present time with large events occurring in the 1950's and 1980's. Gas seepage in the area continues to be observed to the present day. The author's theory is that an outcrop coal fire intersected gas seepage resulting in explosions which ejected coal from steeply dipping beds causing structural failure parallel to strike. There is no question that Fruitland coal outcrops have had historic gas seepage events prior to oil and gas production activities in the San Juan Basin.