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Day 3. Wednesday, August 13, 2003: Travel to Grand Junction

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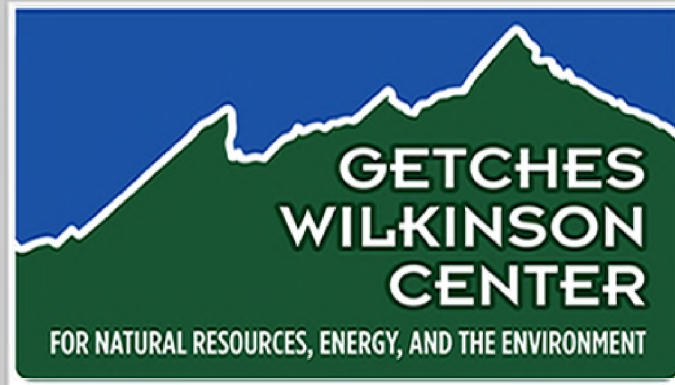
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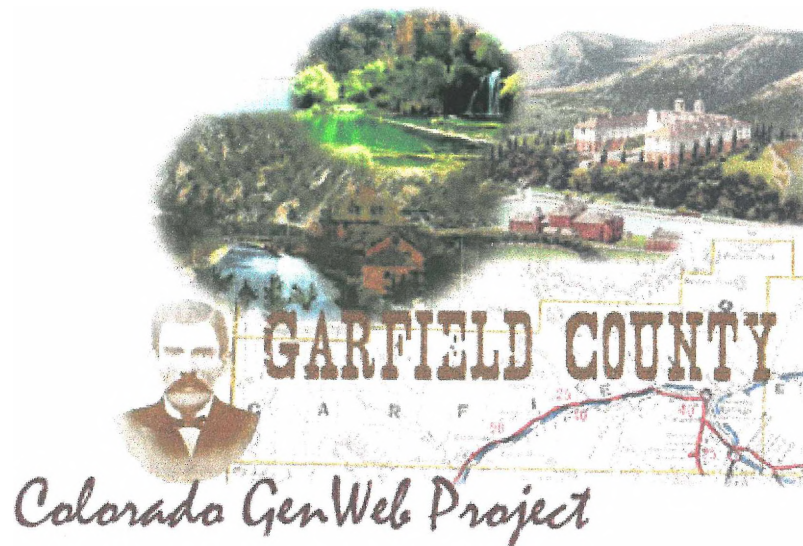
Day 3. Wednesday, August 13, 2003: Travel to Grand Junction, in ENERGY FIELD TOUR 2003 (Natural Res. Law Ctr., Univ. of Colo. Sch. of Law 2003).

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Travel to Grand Junction

Garfield County, Colorado. A Short History and Description, Colorado GenWeb Project, Judy Crook and Doug Cullen, <http://rootsweb.com/~cogarfie/history.htm>

Nuclear Stimulation Projects: Rulison and Rio Blanco
Law 105.85, June 1998



Garfield County, Colorado. A Short History and Description
by Judy Crook and supplemented by Doug Cullen

Garfield County is located in the scenic plateau and canyon country of western Colorado. Covering 3000 square miles, it is 110 miles long and extends to the Utah border. It was carved out of Summit County on February 10, 1883. In historical times, the earliest inhabitants were the Ute Indians, and the land was theirs by treaty until April 12, 1880, when they were removed to reservations after the "Meeker Massacre" of 1879. Although explorers, missionaries, miners, and a few settlers had already visited the area of Garfield County, the main influx of settlers began to arrive and towns were founded beginning in 1880.

The towns in Garfield County are located along the Colorado and Roaring Fork rivers in the eastern end of the county, while much of the western portion has only a few roads and fewer inhabitants.

Carbonate, a town founded high on the Flattops, was the first county seat. It is now a ghost town.

The town of **Defiance** was founded in 1831 by Isaac Cooper who hoped to develop the natural hot springs into a resort. Unfortunately he died before his dream could be realized. It became the county seat in 1883 and was incorporated and renamed in 1885 as Glenwood Springs, which remains the county seat and largest city today. In 1887 a coal tycoon, Walter Devereaux purchased the hot springs and vapor caves for \$125,000 and began to build the famous pool and spa resort. This was the same year that the Denver and Rio Grande Railroad extended it's tracks through the difficult Glenwood Canyon and into Glenwood Springs, Aspen and beyond. 1887 was also the year that the notorious gambler, gunslinger and dentist, Doc Holliday, died of tuberculosis in Glenwood Springs. He died in bed and is buried in Linwood Cemetery although the exact burial location in the cemetery is unknown.

Carbondale was incorporated in 1888, and has been both an agricultural center and a transportation center for the marble mined at Marble and the coal mined at Redstone. Carbondale's October festival is "Potato Days" which celebrates the agricultural heritage of the area.

The Colorado Fuel and Iron Company built a series of coke ovens at **Cardiff**, a town formerly located near Glenwood Springs, to produce coke from coal for smelters. A few of these coke

ovens survive.

New Castle, incorporated in 1888, was originally a coal mining town. In the 1890s a series of methane gas explosions over several years killed dozens of miners. The part of the Grand Hogback where the explosions took place is still burning today, and we call it Burning Mountain.

Silt, 7 miles west of New Castle, was historically a farming/ranching community. It is named after a major byproduct of the Colorado River, a river which flows from the county line east of Glenwood Springs along the interstate into Mesa County (and into Utah and Arizona). Silt was first settled in 1885 and was incorporated in 1915.

Rifle, 7 miles west of Silt, is another community that was historically a farming/ranching community. It was founded in 1882 and incorporated in 1905. Rifle lies in a valley surrounded by mesas and mountains. Teddy Roosevelt came hunting here in 1901 for bears. The bears are gone, but wildlife, especially mule deer and elk, abounds. [Rifle Falls State Park](#) is located 14 miles north of Rifle. The falls spill over a limestone cliff. In 1910 the town of Rifle built the Rifle Hydroelectric Plant at the falls (the first one in Colorado) which changed the creek's natural flow from one wide waterfall into the three falls seen today. There are 3 theories on the town's unique name. One story relates that it was named so when an early explorer left his rifle leaning against a tree and later returned for it. The second story claims that it was named for the custom of firing one's rifle to signal others. The third story states that an 1880 group of soldiers were working on the road between Rifle and Meeker. One man left his rifle at camp along a stream bank. In returning for it he named the creek Rifle Creek and the town took it's name from the creek.

Parachute, was named for the parachute-like appearance of the feeder canyons that flowed into the main valley. It was settled in 1882 and renamed Grand Valley in 1904. In 1980 the town reverted to the name Parachute after continuing confusion with the Grand River Valley and Grand Junction. On June 7, 1905 Kid Curry (of Hole-in-the-Wall Gang fame), also known as Harvey Logan, stopped and robbed the westbound Denver & Rio Grande Railroad. After boarding the train at Parachute, the train was stopped on Streit Flats, 3 miles west of town, where he was joined by 2 accomplices. They blew the safe open with dynamite and then escaped on horseback. Historians differ on whether or not the safe contained money.

Battlement Mesa (which is unincorporated) lies west of Rifle. Rifle and Parachute are nestled at the base of a vast mountain complex which we call the Bookcliffs, but which are officially called the Roan Cliffs. The Bookcliffs are composed of oil shale, which is a shale which actually burns because of the high oil content. Battlement Mesa was founded by Exxon during the 1980s during the most recent oil shale boom that went bust. The area between Rifle and Parachute is dotted with natural gas wells. In the 1970s, the federal government set off two small underground nuclear explosions near the unincorporated community of Rulison. This was an experiment to see if the tight porespace in the rock formations could be fractured so that oil and gas could migrate further distances into existing wellbores. This would reduce the necessity of drilling more wells and lessen the impact on the environment. Although the experiment was a technical success, no further use of this technology has been utilized due to public concern.

While the county retains part of its ranching and farming heritage, and tourism is important, every town from Carbondale to Parachute has become a bedroom community to provide workers to the ever-booming and ever-expanding Aspen skiing economy. People commute to Aspen, 86 miles from Battlement Mesa, as well as to Grand Junction, 63 miles from Rifle.

Nuclear Stimulation Projects

Quick Links:

| [Home](#)

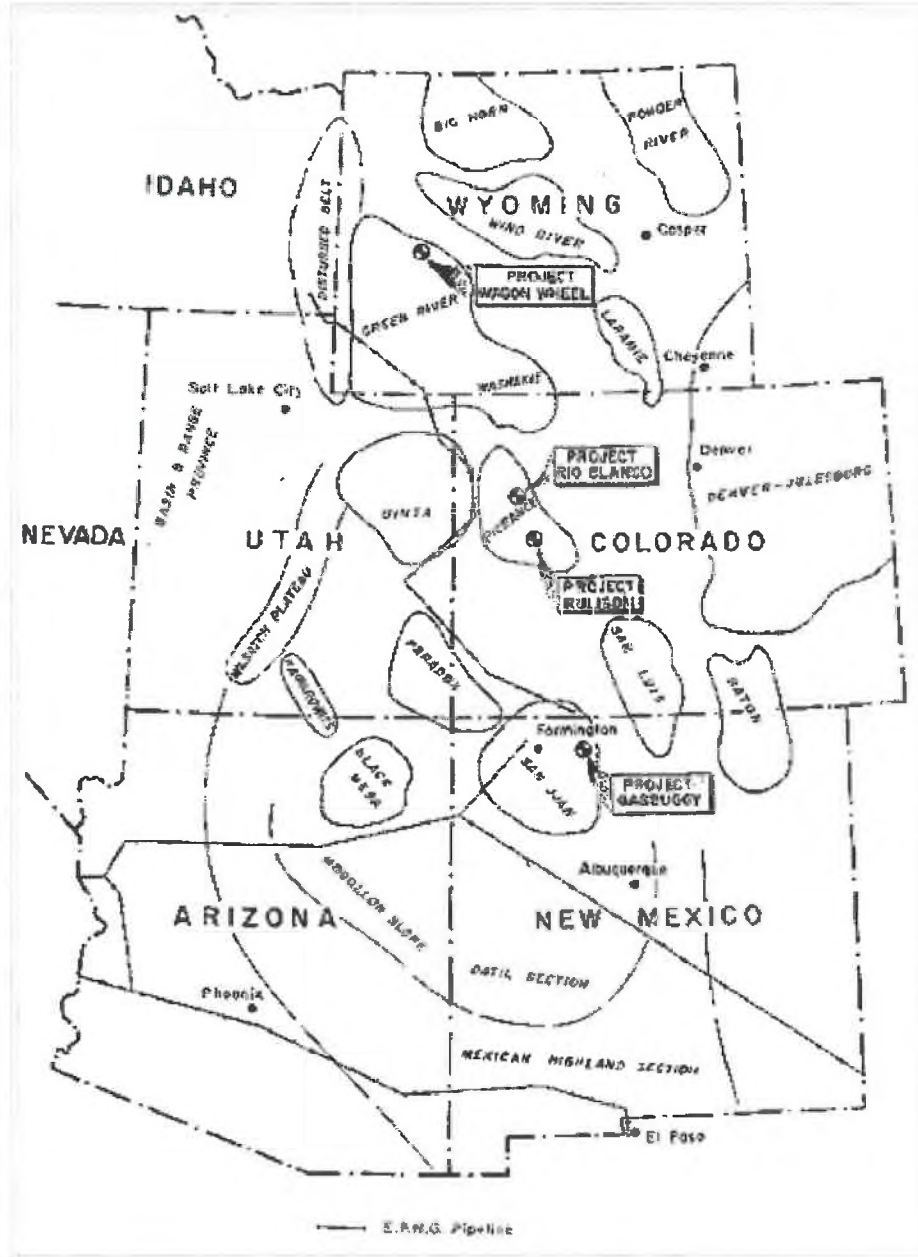


Wagon Guide:

| [Glossary](#)

| [TOC](#)

| [Thesis PDF](#)



There were a total of four nuclear stimulation projects proposed.

The locations are indicated on the map above. The "[EPNG](#)" mentioned at the bottom of the map is El Paso Natural Gas, the company that wanted to use nuclear stimulation to free natural gas in its fields.

The four projects were executed/planned from south to north:

- **Gasbuggy:** Project Gasbuggy was near Farmington, New Mexico, in the northwestern corner of the state. It consisted of one 29 kiloton nuclear device detonated December 10, 1967 and received little

negative publicity. In fact, the project was "heralded by the New Mexico Governor, the State's Senators, and members of the Joint Committee on Atomic Energy." The newspaper coverage in New Mexico was generally positive. For example, the day after the test shot, one newspaper included a photograph of a Native American with an employee of the El Paso Natural Gas (EPNG) Company. The caption read, "Space Age First Helps First American." Pamphlets describing the project were printed in Spanish and English and distributed widely. Project Gasbuggy was considered a technical success according to many. The evaluation of the project was that the "shot stimulated gas flow into the well to a degree somewhat greater than had been possible through conventional techniques, but uncertainty remained as to how much improvement had occurred." The project went forward because of overwhelming support from both elected officials and those living in the area.

External Links: ● [Gasbuggy Plaque](#) ● [Gasbuggy Story](#)

- **Rulison:** Project Rulison, in Colorado faced a lot of opposition, including a lawsuit filed by environmentalists opposing the project. The single nuclear device of 40 kilotons, was detonated September 10, 1969, near the town of Rifle, Colorado. Unlike Gasbuggy, the Rulison project faced opposition from a number of protestors both at the scene and in the court system. The day the project was detonated, four protestors paired off and just before detonation made their presence known using fireworks inside the secured zone. A helicopter swept two of the protestors out of the area while the other two remained and experienced the blast's shock waves. Meanwhile, local residents met the Rulison detonation with a "fun afternoon." In fact, one local resident "remembers being irritated by the protestors who'd come in from out of town." The preliminary results "indicated that the experiment had demonstrated the technical feasibility of nuclear stimulation of gas in the Rulison field."

External Links: ● [Rulison Info](#) ● [Film](#) ● [Essay](#) ● [1998 Article](#)

- **Rio Blanco:** Rio Blanco was detonated May 17, 1973, in Colorado's Rio Blanco County. The project differed substantially from its predecessors because it used three 30-kiloton nuclear devices stacked vertically and detonated simultaneously. The objective of Rio Blanco was to determine if detonating the nuclear devices would result in the three rubble chimneys collapsing together into one large chimney, thus producing more natural gas. Technically speaking, Project Rio Blanco was a failure. In its summary of the project the Colorado Department of Public Health and Environment noted that, "Further analysis in mid-June, 1974, revealed that there was no communication between the top and the lower chimneys," thus defeating the purpose of the design.