

## Introduction

Sedan Crater was formed on July 6, 1962, when the U.S. Atomic Energy Commission, predecessor of the U.S. Department of Energy, conducted an excavation experiment using a 104-kiloton thermonuclear device. The test, detonated 635 feet underground, helped develop technology for earth-moving projects. The awe-inspiring explosion displaced about 12 million tons of earth, creating a crater 1,280 feet in diameter and 320 feet deep. The force of the detonation released seismic energy equivalent to an earthquake with a magnitude of 4.75 on the Richter Scale.

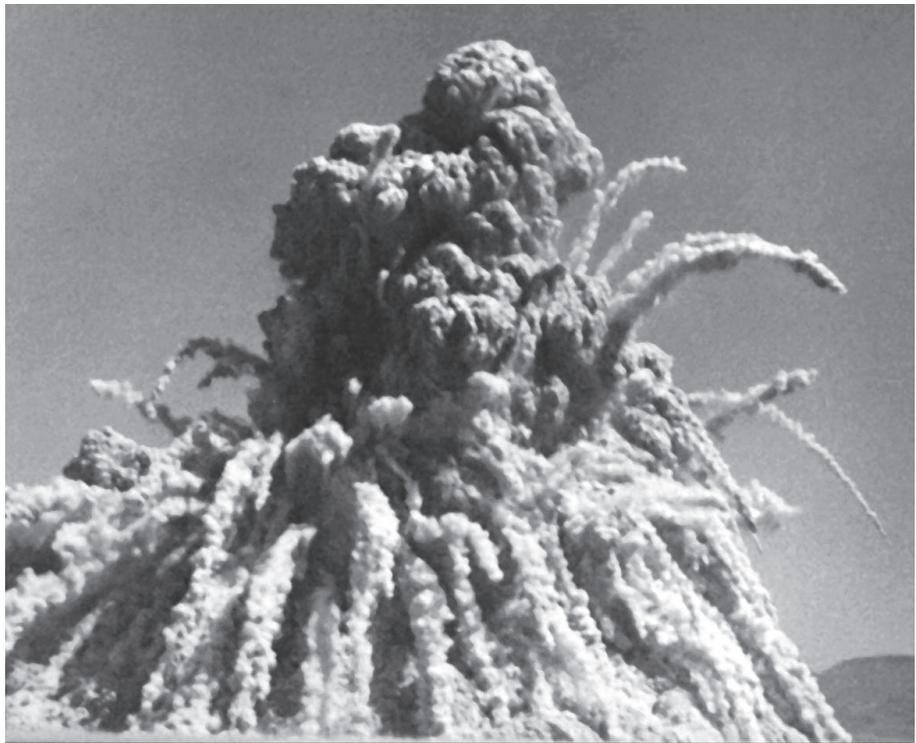
# Sedan Crater

## Plowshare Program

The Atomic Energy Commission established the Plowshare Program as a research and development project to explore the technical and economic feasibility of using nuclear explosives for industrial applications. From 1958 to 1975, the Plowshare Program operated under the auspice that relatively inexpensive energy available from nuclear explosions could possibly prove useful for a wide variety of peaceful purposes. Between December 1961 and May 1973, the United States conducted 27 Plowshare nuclear explosive tests comprising 35 individual detonations.

Conceptually, industrial applications resulting from the use of nuclear explosives could be divided into two broad categories: large-scale excavation and quarrying, and underground engineering.

Possible excavation included: canals, harbors, highway and railroad cuts through mountains, open pit mining, construction of dams, and other quarry and construction related projects. Underground nuclear explosion applications included: stimulation of natural gas production, preparation of removable ore bodies for in-situ leaching, creation of underground zones of fractured



*Sedan displaces approximately 12 million tons of earth during the 1962 detonation.*

oil shale for in-situ retorting, and formation of underground natural gas and petroleum storage reservoirs.

## **Favorite Visitors Spot**

Visitors on escorted general interest tours of the Site come from every region of the United States to see one of the largest man-made craters on

earth. A platform on the edge of the crater allows visitors to experience the impact of the crater's size. The site is visited by more than 10,000 tourists a year.

On April 1, 1994, it was entered into the National Register of Historic Places by the director of the National Park Service.



*Sedan crater, shortly after the 1962 detonation.*



For more information, visit:

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