United States Nuclear Tests
July 1945 through September 1992

U.S. Department of Energy
Nevada Operations Office
This publication supersedes DOE/NV–209, Rev. 14, dated December 1994.

This publication has been reproduced directly from the best available copy.

Available for public sale, in paper, from:
U.S. Department of Commerce
National Technology Information Service
5285 Port Royal Road
Springfield, VA  22161
Phone:  800.553.6847
Fax:  703.605.6900
Email:  orders@ntis.fedworld.gov
Online ordering:  http://www.ntis.gov/ordering.htm

Available electronically at http://www.doe.gov.bridge

Available for a processing fee to U.S. Department of Energy and its contractors, in paper, from:
U.S. Department of Energy
Office of Scientific and Technical Information
P.O. Box 62
Oak Ridge, TN  37831-0062
Phone:  865.576.8401
Fax:  865.576.5728
Email:  reports@adonis.osti.gov

Pictured on the front cover is Sedan Crater.  Sedan Crater was formed when a 104 kiloton explosive buried under 635 feet of desert alluvium was fired at the Nevada Test Site on July 6, 1962, displacing 12 million tons of earth.  The crater is 320 feet deep and 1,280 feet in diameter.
This page intentionally left blank.
| Introduction | vii |
| Caveat | vii |
| Detonation Times and Dates | vii |
| Locations | vii |
| Moratorium | vii |
| Purposes of United States Tests | viii |
| Radiological Effluents Released from Nuclear Detonations | viii |
| Seismic Source Data | ix |
| Series | ix |
| Treaties | ix |
| Types and Purposes | ix |
| Yields | x |
| United States Nuclear Tests – Total – By Calendar Year | xi |
| United States Nuclear Tests – Total – By Type | xii |
| United States Nuclear Tests – Total – By Location | xiii |
| United States Nuclear Tests/Detonations – Total – By Location | xv |
| United States Nuclear Detonations – Total – By Purpose | xvi |
| United States Nuclear Tests/Detonations Conducted on the Nevada Test Site – By Area | xviii |
| Unites States Nuclear Tests – By Date | |
| Operation Crossroads | 2 |
| Operation Sandstone | 2 |
| Operation Ranger | 2 |
| Operation Greenhouse | 2 |
| Operation Buster | 2 |
| Operation Jangle | 2 |
| Operation Tumbler-Snapper | 4 |
| Operation Ivy | 4 |
| Operation Upshot - Knothole | 4 |
| Operation Castle | 4 |
| Operation Teapot | 4 |
| Operation Wigwam | 6 |
| Operation Project 56 | 6 |
| Operation Redwing | 6 |
| Operation Project 57 | 8 |
| Operation Plumbob | 8 |
This page intentionally left blank.
Introduction

This document lists chronologically and alphabetically by name all nuclear tests and simultaneous detonations conducted by the United States from July 1945 through September 1992.

Two nuclear weapons that the United States exploded over Japan ending World War II are not listed. These detonations were not "tests" in the sense that they were conducted to prove that the weapon would work as designed (as was the first test near Alamogordo, New Mexico on July 16, 1945), or to advance nuclear weapon design, or to determine weapons effects, or to verify weapon safety as were the more than one thousand tests that have taken place since June 30, 1946.

The nuclear weapon (nicknamed “Little Boy”) dropped August 6, 1945 from a United States Army Air Force B-29 bomber (the Enola Gay) and detonated over Hiroshima, Japan had an energy yield equivalent to that of 15,000 tons of TNT. The nuclear weapon (virtually identical to "Fat Man") exploded in a similar fashion August 9, 1945 over Nagasaki, Japan had a yield of 21,000 tons of TNT. Both detonations were intended to end World War II as quickly as possible.

Data on United States tests were obtained from, and verified by, the U.S. Department of Energy’s three weapons laboratories -- Los Alamos National Laboratory, Los Alamos, New Mexico; Lawrence Livermore National Laboratory, Livermore, California; and Sandia National Laboratories, Albuquerque, New Mexico; and the Defense Threat Reduction Agency. Additionally, data were obtained from public announcements issued by the U.S. Atomic Energy Commission and its successors, the U.S. Energy Research and Development Administration, and the U.S. Department of Energy, respectively.

Caveat

The information contained in the document has been gleaned from multiple sources over time. Some of the data has been updated to reflect the most recent analysis conducted by the national weapons laboratories. When discrepancies were encountered, every attempt was made to use the most acceptable or verifiable information. In some instances, multiple spellings of test names were encountered and the most commonly used name is included in this document, i.e., Johnnie Boy versus Johnie Boy. Once a “test” has been categorized as such, no attempt has been made to change its categorization based on the current definition of a “test” found in the Protocols to the treaties on Limitation of Underground Nuclear Weapons Tests and the Underground Nuclear Explosions for Peaceful Purposes (1990). For example, Huron Landing and Diamond Ace were conducted simultaneously on September 23, 1982 and announced as individual tests. Based on the current definition of a “test,” they would be considered as “one test with two simultaneous detonations.”

Detonation Times and Dates

Detonation time and date for all detonations listed in this document were converted from local time to Greenwich Mean Time (GMT). The date listed is the GMT date for the detonation. Times are given in the hundredth of a second where available, otherwise a default value of 0.00 seconds is used.

Locations

The first test of a nuclear weapon was in the atmosphere on July 16, 1945, in a remote part of New Mexico on what was then the Alamogordo Bombing Range, and is now the White Sands Missile Range. The site is 55 miles northwest of Alamogordo, New Mexico.

At various times between June 1946 and November 1962, atmospheric and underground tests were conducted by the United States in the Marshall Islands, Christmas Island, Johnston Atoll in the Pacific Ocean, and over the South Atlantic Ocean.

Between January 1951 and July 1962, atmospheric and underground nuclear tests were conducted at the Nevada Test Site.

Since July 1962, all nuclear tests conducted in the United States have been underground, and most of them have been at the Nevada Test Site. Some tests were conducted on the Nellis Air Force Range (NAFR); in central and northwestern Nevada; in Colorado, New Mexico, and Mississippi; and on Amchitka, one of the Aleutian Islands off the coast of Alaska.

Moratorium

On October 31, 1958, the United States entered into a unilateral testing moratorium announced by President Eisenhower with the understanding that the former Soviet Union also would refrain from conducting tests. The Soviet Union resumed testing in September 1961 with a series of the largest number of tests ever conducted.
On September 15, 1961, the United States resumed testing at the Nevada Test Site on a year-round basis.

On October 2, 1992, the United States entered into another unilateral moratorium on nuclear weapons testing announced by President Bush. President Clinton extended this moratorium in July 1993, and again in March 1994 until September 1995.

On August 11, 1995, President Clinton announced the decision to negotiate a comprehensive nuclear test ban treaty while continuing the cessation of nuclear testing by the United States.

On September 24, 1996, President Clinton signed the Comprehensive Nuclear Test Ban Treaty which prohibits "any nuclear weapons test explosion" by any State Party. (See Treaties.)

Purposes of United States Tests

Past tests have been described as being for one of seven purposes: Joint US-UK, Plowshare, Safety Experiment, Storage-Transportation, Vela Uniform, Weapons Effects, and Weapons Related.

With the declassification of all previous simultaneous detonations, purpose is now attributed to each detonation. Weapons related tests were conducted to gather data on nuclear devices; weapons effects tests were conducted, usually by the U.S. Department of Defense (DoD), to determine the effects of nuclear detonations on military offensive and defensive systems; and tests conducted for the United Kingdom (UK) are shown as "Joint US-UK."

Radiological Effluents Released from Nuclear Detonations

Unless otherwise noted, all nuclear tests at the Nevada Test Site or the Nellis Air Force Range (NAFR) to September 15, 1961 produced radioactivity detected offsite. (See Glossary for definition of offsite.)

Unless otherwise noted, no test at the Nevada Test Site or the NAFR on or after September 15, 1961 had a release of radioactivity that was detected offsite. The release of radioactivity from a test can occur:

- accidentally as a result of a containment failure;
- accidentally or deliberately as a result of post-event operations; or
- deliberately as a result of post-event controlled purging of gases from a tunnel.

All releases resulting from a containment failure, even if not detected offsite, are reported. Radiation releases resulting from tunnel purging or normal operations are not reported in this document unless detected offsite, since they are carefully monitored. These releases are listed in the U.S. Department of Energy, Nevada Operations Office publication titled, Radiological Effluents Released from U.S. Continental Tests, DOE/NV-317.

Seismic Source Data

Detonation times and locations (latitude, longitude, and surface elevation) are included and are intended for use in the calibration of seismic stations that are part of the International Monitoring System called for in the Comprehensive Nuclear Test Ban Treaty.

For completeness, even underground nuclear detonations with little or no nuclear yield have been included. Those detonations that could be especially valuable for International Monitoring System calibration are identified with boldface type. Included in this subgroup are 8 detonations that took place somewhere other than the Nevada Test Site and 14 that occurred at the Nevada Test Site. These 14 were selected because they:

- occurred within the last five years of testing, therefore increasing the chance that the detonations were recorded on modern seismograph systems;
- are well distributed about the Nevada Test Site to include at least two from each of the major test regions (i.e., Pahute Mesa, Rainier Mesa, and Yucca Flat);
- are relatively large allowing recording on multiple instruments; or
- were the subject of special study.

The seismic source data for underground nuclear detonations was gathered from all available official sources, including reports by the U.S. Department of Energy, its predecessors and contractors, and the former U.S. Defense Nuclear Agency. All reasonable effort has been expended to ensure the greatest possible accuracy of this seismic data. A blank entry means that the data was either not available or substantial conflicts between different sources could not be resolved.
Time calibrations are obtained from the National Institute of Standards and Technology WWV radio stations. Tests were typically planned to be detonated on the exact hour, minute, or second. However, the firing systems always introduce some delay so that the actual detonation time could be as much as 150 milliseconds later than intended. When this delay is available, detonation times are given to the nearest 0.01 second, uncorrected for WWV propagation, otherwise a default value of 0.00 is given.

Latitude and longitude locations are the surface-ground-zero location of the drill hole or other emplacement location. Locations and surface elevations were originally surveyed in the respective State Plane Coordinates, North American Datum of 1927. These were then converted to latitude and longitude using the 1984 reference spheroid (DoD, 1987a) and surface elevation corrections. (These corrections apply to all U.S. tests except for those in Alaska (DoD, 1987b).) These coordinates are presented to an accuracy of 0.001 degree or approximately 100 meters.

Series

Each series of tests is given a name such as *Operation Crossroads*. United States nuclear tests were conducted on an intermittent basis from June 1946 to October 1958.

On September 15, 1961, when the United States resumed testing at the Nevada Test Site on a year-round basis with *Operation Nougat*, tests were grouped for fiscal and reporting purposes according to the fiscal year in which they took place. For example, fiscal year 1963 tests -- which began July 1, 1962 and extended through June 30, 1963 -- were in the Operation Storax series.

Between April and November of 1962, the United States conducted *Operation Dominic*, which included the DoD Operation Fishbowl high-altitude tests in the Pacific. The DoD also conducted four weapons effects tests at the Nevada Test Site in July 1962 as *Operation Sunbeam*.

In 1976, the federal government changed the fiscal year to begin on October 1 and end on September 30. Accordingly, the fiscal year 1976 series, *Operation Anvil*, did not end on June 30, but was extended through September 30, 1976 -- a period of 15 months.

Treaties

On August 5, 1963, the United States and the former Soviet Union signed the Limited Test Ban Treaty which effectively banned testing of nuclear weapons in the atmosphere, the oceans, and space.

In 1974 and 1976, the United States and former Soviet Union also signed the Threshold Test Ban Treaty and the Peaceful Nuclear Explosions Treaty, respectively, restricting all nuclear test explosions to yields no greater than 150 kilotons.

The Joint Verification Experiment was conducted in 1988 by the United States and the former Soviet Union as a prelude to the signing of the Protocols to the treaties on Limitation of Underground Nuclear Weapon Tests and the Underground Nuclear Explosions for Peaceful Purposes.

Proposed treaty verification techniques and measurements were employed on the United States test, *Kearsage* conducted on August 17, 1988 at the Nevada Test Site and on *Shagan*, the test by the former Soviet Union, conducted on September 14, 1988 at the Semipalatinsk Test Site.

In May 1995, the United Nations reached consensus and indefinitely extended the Nuclear Nonproliferation Treaty. This action was a priority for the United States arms control agenda and critical to proceeding with a test ban treaty. Later that year on August 11, 1995, President Clinton announced the decision to negotiate a comprehensive nuclear test ban treaty while continuing the cessation of nuclear testing by the United States.

On September 24, 1996, President Clinton signed the Comprehensive Nuclear Test Ban Treaty which prohibits "any nuclear weapons test explosion" by any State Party. In response to the Treaty’s prohibition against nuclear weapons testing, however, the U.S. Department of Energy has been directed to maintain an underground test readiness program in case it is in the "supreme national interest" to resume nuclear weapons testing.

Types and Purposes

The definition of terms used in this document appears in the Glossary. **Type** refers to the method of deployment of the nuclear device at time of detonation such as *tower, tunnel, airdrop*, etc.

**Purpose** indicates whether the test was part of the weapons development program, a DoD effects test, a joint United States-United Kingdom (US-UK) test, or was part of some special program that involved the use of nuclear devices. In the **Summary**, the sum of all tests conducted underground (*tunnel, shaft, and crater*) appears as **Total Underground**. With the exception of five underwater tests, the remaining tests appear as **Total Atmospheric**.
Yields

The nomenclature for test yields varied according to information policy governing specific years. In some cases, no yield information has been released; in a few cases, the terms "very slight" and "slight" were used without amplification. Except for tests where specific yields or relative specific yields such as "about 2 kt," "several Mt," "less than 0.1 kt," etc., were announced, test yields are given in these terms:

1945 through 1963

- Low (less than 20 kt)
- Intermediate (20 to 200 kt)
- Submegaton (less than 1 Mt, but more than 200 kt)
- Low Megaton (from 1 to several Mt)
- Megaton Range

1964 through February 1976

- Less than 20 kt
- 20 to 200 kt
- 200 to 1000 kt

March 1976

During a series of high-yield test conducted during this month, two ranges were added, and the 200 to 1000 kt range was dropped.

- 200 to 500 kt
- 500 to 1000 kt

Since March 1976

On March 31, 1976, the former Soviet Union and the United States agreed to limit the maximum yield of underground tests to 150 kt.

- Less than 20 kt
- Less than 150 kt
- 20 to 150 kt

Joint Verification Experiment

Data exchanges provided for in the Protocol to the 1974 Treaty on the Limitation of Underground Nuclear Weapons Tests required the exchange of historic explosion data on five detonations with yields within the 100 - 150 kt range. Thus, this yield range was added.

- 100 to 150 kt
### United States Nuclear Tests – Total – By Calendar Year

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 1945</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>CY 1946</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>CY 1947</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 1948</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>CY 1949</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 1950</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 1951</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>CY 1952</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>CY 1953</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>CY 1954</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>CY 1955</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>CY 1956</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>CY 1957</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>CY 1958</td>
<td>77</td>
<td>0</td>
</tr>
<tr>
<td>CY 1959</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 1960</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 1961</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>CY 1962</td>
<td>96</td>
<td>2</td>
</tr>
<tr>
<td>CY 1963</td>
<td>47</td>
<td>0</td>
</tr>
<tr>
<td>CY 1964</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>CY 1965</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>CY 1966</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>CY 1967</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>CY 1968</td>
<td>56</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 1969</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>CY 1970</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>CY 1971</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>CY 1972</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>CY 1973</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>CY 1974</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>CY 1975</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>CY 1976</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>CY 1977</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>CY 1978</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>CY 1979</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>CY 1980</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>CY 1981</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>CY 1982</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>CY 1983</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>CY 1984</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>CY 1985</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>CY 1986</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>CY 1987</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>CY 1988</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>CY 1989</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>CY 1990</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>CY 1991</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>CY 1992</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total US Tests** 1,030  
**Total US-UK Tests** 24  
**TOTAL TESTS** 1,054

**NOTE:** Totals do not include two combat uses of nuclear weapons, which are not considered "tests.

The first combat detonation was a 15 kt weapon airdropped August 6, 1945 at Hiroshima, Japan.

The second was a 21 kt weapon airdropped August 9, 1945 at Nagasaki, Japan.
# United States Nuclear Tests – Total – By Type

<table>
<thead>
<tr>
<th>Type</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airburst</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Airdrop</td>
<td>52</td>
<td>0</td>
</tr>
<tr>
<td>Balloon</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Barge</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>Rocket</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Surface</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Tower</td>
<td>56</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Atmospheric</strong></td>
<td><strong>210</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crater</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Shaft</td>
<td>739</td>
<td>24</td>
</tr>
<tr>
<td>Tunnel</td>
<td>67</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Underground</strong></td>
<td><strong>815</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Underwater</strong></td>
<td><strong>5</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL TESTS</strong></td>
<td><strong>1,030</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>
## United States Nuclear Tests – Total – By Location

<table>
<thead>
<tr>
<th>Location</th>
<th>US</th>
<th>US-UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total South Atlantic</strong></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bikini</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>Christmas Island</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Enewetak</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>Johnston Island</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Pacific</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Pacific</strong></td>
<td>106</td>
<td>0</td>
</tr>
<tr>
<td>Alamogordo, New Mexico</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Amchitka, Alaska</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Carlsbad, New Mexico</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Central Nevada</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fallon, Nevada</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Farmington, New Mexico</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Grand Valley, Colorado</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hattiesburg, Mississippi</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Nellis Air Force Range</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Rifle, Colorado</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Other</strong></td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td><strong>Atmospheric</strong></td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td><strong>Underground</strong></td>
<td>804</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total NTS</strong></td>
<td>904</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL TESTS</strong></td>
<td>1,030</td>
<td>24</td>
</tr>
</tbody>
</table>
Figure 1. United States Nuclear Test Locations – Nevada Test Site and Other
A test is defined in the Threshold Test Ban Treaty as either a single underground nuclear explosion (detonation) conducted at a test site, or two or more underground nuclear explosions (detonations) conducted within an area delineated by a circle having a diameter of two kilometers and conducted within a total period of time not to exceed 0.1 second. Sixty-three of the 1,054 nuclear tests conducted by the United States consisted of more than one underground nuclear explosion (detonation).

Nevada Test Site - 62 tests had simultaneous detonations
Rifle, Colorado - 1 test had a simultaneous detonation

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Tests</th>
<th>Number of Detonations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total South Atlantic</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bikini</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Christmas Island</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Enewetak</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Johnston Island</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Pacific</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Pacific</strong></td>
<td><strong>106</strong></td>
<td><strong>106</strong></td>
</tr>
<tr>
<td>Alamogordo, New Mexico</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Amchitka, Alaska</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Carlsbad, New Mexico</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Central Nevada</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fallon, Nevada</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Farmington, New Mexico</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grand Valley, Colorado</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hattiesburg, Mississippi</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Nellis Air Force Range</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Rifle, Colorado</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Other</strong></td>
<td><strong>17</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>Atmospheric</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Underground</strong></td>
<td><strong>828</strong></td>
<td><strong>921</strong></td>
</tr>
<tr>
<td><strong>Total NTS</strong></td>
<td><strong>928</strong></td>
<td><strong>1,021</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,054</strong></td>
<td><strong>1,149</strong></td>
</tr>
</tbody>
</table>
## United States Nuclear Detonations – Total – By Purpose

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Detonations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint US-UK</td>
<td>24</td>
</tr>
<tr>
<td>Plowshare</td>
<td>35</td>
</tr>
<tr>
<td>Safety Experiment</td>
<td>88</td>
</tr>
<tr>
<td>Storage-Transportation</td>
<td>4</td>
</tr>
<tr>
<td>Vela Uniform</td>
<td>7</td>
</tr>
<tr>
<td>Weapons Effects</td>
<td>100</td>
</tr>
<tr>
<td>Weapons Related</td>
<td>891</td>
</tr>
<tr>
<td><strong>TOTAL DETONATIONS</strong></td>
<td><strong>1,149</strong></td>
</tr>
</tbody>
</table>

*Grable was fired from a 280mm gun on May 25, 1953 at the Nevada Test Site. It was an airburst, weapons related test that produced a yield of 15 kilotons.*

*Priscilla was detonated on June 24, 1957 at the Nevada Test Site. It was a balloon, weapons related test that produced a yield of 37 kilotons.*
Figure 2. United States Nuclear Test Locations – Areas on the Nevada Test Site
## United States Nuclear Tests/Detonations Conducted on the Nevada Test Site – By Area

<table>
<thead>
<tr>
<th>Area on the Nevada Test Site</th>
<th>Number of Tests</th>
<th>Number of Detonations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>144</td>
<td>169</td>
</tr>
<tr>
<td>3</td>
<td>266</td>
<td>288</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>5</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>8</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>115</td>
<td>133</td>
</tr>
<tr>
<td>10</td>
<td>57</td>
<td>71</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>20</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>928</strong></td>
<td><strong>1,021</strong></td>
</tr>
</tbody>
</table>

## Major Test Regions on the Nevada Test Site

<table>
<thead>
<tr>
<th>Region</th>
<th>Area(s) on the Nevada Test Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frenchman Flat</td>
<td>5, 11</td>
</tr>
<tr>
<td>Pahute Mesa</td>
<td>19, 20</td>
</tr>
<tr>
<td>Rainier Mesa</td>
<td>12</td>
</tr>
<tr>
<td>Yucca Flat</td>
<td>1, 2, 3, 4, 6, 7, 8, 9, 10</td>
</tr>
</tbody>
</table>
United States Nuclear Tests --
By Date
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinity</td>
<td>07/16/1945</td>
<td>LANL</td>
<td>Alamogordo, New Mexico</td>
<td>- - -</td>
</tr>
<tr>
<td>Able</td>
<td>06/30/1946</td>
<td>LANL/DoD</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>Baker</td>
<td>07/24/1946</td>
<td>LANL/DoD</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>X-Ray</td>
<td>04/14/1948</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Yoke</td>
<td>04/30/1948</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Zebra</td>
<td>05/14/1948</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Able</td>
<td>01/27/1951</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td>- - -</td>
</tr>
<tr>
<td>Baker</td>
<td>01/28/1951</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td>- - -</td>
</tr>
<tr>
<td>Easy</td>
<td>02/01/1951</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td>- - -</td>
</tr>
<tr>
<td>Baker-2</td>
<td>02/02/1951</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td>- - -</td>
</tr>
<tr>
<td>Fox</td>
<td>02/06/1951</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td>- - -</td>
</tr>
<tr>
<td>Dog</td>
<td>04/07/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Easy</td>
<td>04/20/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>George</td>
<td>05/08/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Item</td>
<td>05/24/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
</tr>
<tr>
<td>Able</td>
<td>10/22/1951</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Baker</td>
<td>10/28/1951</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Charlie</td>
<td>10/30/1951</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Dog</td>
<td>11/01/1951</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Easy</td>
<td>11/05/1951</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td>- - -</td>
</tr>
<tr>
<td>Sugar</td>
<td>11/19/1951</td>
<td>LANL/DoD</td>
<td>NTS Area 9</td>
<td>- - -</td>
</tr>
<tr>
<td>Uncle</td>
<td>11/29/1951</td>
<td>LANL/DoD</td>
<td>NTS Area 10</td>
<td>- - -</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Crossroads</strong></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Underwater</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Sandstone</strong></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Ranger</strong></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Greenhouse</strong></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Buster</strong></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Jangle</strong></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td>20:00:00.00</td>
<td>37.168</td>
<td>-116.043</td>
<td>1283</td>
<td>Crater</td>
</tr>
</tbody>
</table>
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Tumbler-Snapper</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Able</td>
<td>04/01/1952</td>
<td>LANL/DoD</td>
<td>NTS Area 5</td>
<td></td>
</tr>
<tr>
<td>24 Baker</td>
<td>04/15/1952</td>
<td>LANL/DoD</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>25 Charlie</td>
<td>04/22/1952</td>
<td>LANL/DoD</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>26 Dog</td>
<td>05/01/1952</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>27 Easy</td>
<td>05/07/1952</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>28 Fox</td>
<td>05/25/1952</td>
<td>LANL</td>
<td>NTS Area 1</td>
<td></td>
</tr>
<tr>
<td>29 George</td>
<td>06/01/1952</td>
<td>LANL</td>
<td>NTS Area 3</td>
<td></td>
</tr>
<tr>
<td>30 How</td>
<td>06/05/1952</td>
<td>LANL</td>
<td>NTS Area 2</td>
<td></td>
</tr>
<tr>
<td><strong>Operation Ivy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 Mike</td>
<td>10/31/1952</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>32 King</td>
<td>11/15/1952</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td><strong>OperationUpshot-Knothole</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 Annie</td>
<td>03/17/1953</td>
<td>LANL</td>
<td>NTS Area 3</td>
<td></td>
</tr>
<tr>
<td>34 Nancy</td>
<td>03/24/1953</td>
<td>LANL</td>
<td>NTS Area 4</td>
<td></td>
</tr>
<tr>
<td>35 Ruth</td>
<td>03/31/1953</td>
<td>LLNL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>36 Dixie</td>
<td>04/06/1953</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>37 Ray</td>
<td>04/11/1953</td>
<td>LLNL</td>
<td>NTS Area 4</td>
<td></td>
</tr>
<tr>
<td>38 Badger</td>
<td>04/18/1953</td>
<td>LANL</td>
<td>NTS Area 2</td>
<td></td>
</tr>
<tr>
<td>39 Simon</td>
<td>04/25/1953</td>
<td>LLNL</td>
<td>NTS Area 1</td>
<td></td>
</tr>
<tr>
<td>40 Encore</td>
<td>05/08/1953</td>
<td>LANL/DoD</td>
<td>NTS Area 5</td>
<td></td>
</tr>
<tr>
<td>41 Harry</td>
<td>05/19/1953</td>
<td>LANL</td>
<td>NTS Area 3</td>
<td></td>
</tr>
<tr>
<td>42 Grable</td>
<td>05/25/1953</td>
<td>LANL</td>
<td>NTS Area 5</td>
<td></td>
</tr>
<tr>
<td>43 Climax</td>
<td>06/04/1953</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td><strong>Operation Castle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 Bravo</td>
<td>02/28/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>45 Romeo</td>
<td>03/26/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>46 Koon</td>
<td>04/06/1954</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>47 Union</td>
<td>04/25/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>48 Yankee</td>
<td>05/04/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>49 Nectar</td>
<td>05/13/1954</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td><strong>Operation Teapot</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 Wasp</td>
<td>02/18/1955</td>
<td>LANL</td>
<td>NTS Area 7</td>
<td></td>
</tr>
<tr>
<td>51 Moth</td>
<td>02/22/1955</td>
<td>LANL</td>
<td>NTS Area 3</td>
<td></td>
</tr>
<tr>
<td>52 Tesla</td>
<td>03/01/1955</td>
<td>LLNL</td>
<td>NTS Area 9</td>
<td></td>
</tr>
<tr>
<td>Operation</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield</td>
<td>Range</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>--------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Tumbler-Snapper</td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>1 kt</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>1 kt</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>31 kt</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>19 kt</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>12 kt</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>15 kt</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>14 kt</td>
<td>30</td>
</tr>
<tr>
<td>Ivy</td>
<td>Surface</td>
<td>Weapons Related</td>
<td>10.4 Mt</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>500 kt</td>
<td>32</td>
</tr>
<tr>
<td>Upshot-Knothole</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>16 kt</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>24 kt</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>200 tons</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>200 tons</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>23 kt</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>43 kt</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>27 kt</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>32 kt</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Airburst</td>
<td>Weapons Related</td>
<td>15 kt</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>61 kt</td>
<td>43</td>
</tr>
<tr>
<td>Castle</td>
<td>Surface</td>
<td>Weapons Related</td>
<td>15 Mt</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>11 Mt</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>110 kt</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>6.9 Mt</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>13.5 Mt</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>1.69 Mt</td>
<td>49</td>
</tr>
<tr>
<td>Teapot</td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>1 kt</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>2 kt</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>7 kt</td>
<td>52</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>Turk</td>
<td>03/07/1955</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
</tr>
<tr>
<td>Hornet</td>
<td>03/12/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
</tr>
<tr>
<td>Bee</td>
<td>03/22/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>Ess</td>
<td>03/23/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 10</td>
</tr>
<tr>
<td>Apple-1</td>
<td>03/29/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 4</td>
</tr>
<tr>
<td>Wasp Prime</td>
<td>03/29/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>HA (High Altitude) Named &quot;HA&quot; for &quot;high altitude&quot; in reference to its intended detonation at an altitude of 40,000 feet</td>
<td>04/06/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 1</td>
</tr>
<tr>
<td>Post</td>
<td>04/09/1955</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>MET (Military Effects Test)</td>
<td>04/15/1955</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
</tr>
<tr>
<td>Apple-2</td>
<td>05/05/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 1</td>
</tr>
<tr>
<td>Zucchini</td>
<td>05/15/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
</tbody>
</table>

**Operation Wigwam**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wigwam</td>
<td>05/14/1955</td>
<td>LANL/DoD</td>
<td>Pacific</td>
<td>- - -</td>
</tr>
</tbody>
</table>

**Operation Project 56**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 56 No. 1</td>
<td>11/01/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 11a</td>
</tr>
<tr>
<td>Project 56 No. 2 Plutonium dispersal</td>
<td>11/03/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 11b</td>
</tr>
<tr>
<td>Project 56 No. 3 Plutonium dispersal</td>
<td>11/05/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 11c</td>
</tr>
<tr>
<td>Project 56 No. 4 Plutonium dispersal</td>
<td>01/18/1956</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 11d</td>
</tr>
</tbody>
</table>

**Operation Redwing**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacrosse</td>
<td>05/04/1956</td>
<td>LANL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Cherokee</td>
<td>05/20/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>Zuni</td>
<td>05/27/1956</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>Yuma</td>
<td>05/27/1956</td>
<td>LLNL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Erie</td>
<td>05/30/1956</td>
<td>LANL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Seminole</td>
<td>06/06/1956</td>
<td>LANL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Flathead</td>
<td>06/11/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>06/11/1956</td>
<td>LANL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Kickapoo</td>
<td>06/13/1956</td>
<td>LLNL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Osage</td>
<td>06/16/1956</td>
<td>LANL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Inca</td>
<td>06/21/1956</td>
<td>LLNL</td>
<td>Eniwetan</td>
<td>- - -</td>
</tr>
<tr>
<td>Dakota</td>
<td>06/25/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operation Teapot -- Continued</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20:30:00.00</td>
<td>37.170</td>
<td>-116.045</td>
<td>1280</td>
<td>Crater</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operation Wigwam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operation Project 56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operation Redwing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Operation Redwing -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81 Mohawk</td>
<td>07/02/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>82 Apache</td>
<td>07/08/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>83 Navajo</td>
<td>07/10/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>84 Tewa</td>
<td>07/20/1956</td>
<td>LLNL</td>
<td>Bikini island</td>
<td>-</td>
</tr>
<tr>
<td>85 Huron</td>
<td>07/21/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>Operation Project 57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86 Project 57 No. 1</td>
<td>04/24/1957</td>
<td>LANL/DoD</td>
<td>NAFR</td>
<td>-</td>
</tr>
<tr>
<td>Operation Plumbbob</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>87 Boltzmann</td>
<td>05/28/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>88 Franklin</td>
<td>06/02/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
</tr>
<tr>
<td>89 Lassen</td>
<td>06/05/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>90 Wilson</td>
<td>06/18/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>91 Priscilla</td>
<td>06/24/1957</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
</tr>
<tr>
<td>92 Coulomb-A</td>
<td>07/01/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
</tr>
<tr>
<td>93 Hood</td>
<td>07/05/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>94 Diablo</td>
<td>07/15/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
</tr>
<tr>
<td>95 John</td>
<td>07/19/1957</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 10</td>
</tr>
<tr>
<td>96 Kepler</td>
<td>07/24/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 4</td>
</tr>
<tr>
<td>97 Owens</td>
<td>07/25/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>98 Pascal-A</td>
<td>07/26/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
</tr>
<tr>
<td>99 Stokes</td>
<td>08/07/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>100 Saturn</td>
<td>08/10/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c.02</td>
</tr>
<tr>
<td>101 Shasta</td>
<td>08/18/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
</tr>
<tr>
<td>102 Doppler</td>
<td>08/23/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>103 Pascal-B</td>
<td>08/27/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>U3d</td>
</tr>
<tr>
<td>104 Franklin Prime</td>
<td>08/30/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>105 Smoky</td>
<td>08/31/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
</tr>
<tr>
<td>106 Galileo</td>
<td>09/02/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 1</td>
</tr>
<tr>
<td>107 Wheeler</td>
<td>09/06/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>108 Coulomb-B</td>
<td>09/06/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>S3g</td>
</tr>
<tr>
<td>109 Laplace</td>
<td>09/08/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>July 1945 through September 1992</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Redwing -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>360 kt</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Barge</td>
<td>Weapons Related</td>
<td>1.85 Mt</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>Barge</td>
<td>Weapons Related</td>
<td>4.5 Mt</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Barge</td>
<td>Weapons Related</td>
<td>5 Mt</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Barge</td>
<td>Weapons Related</td>
<td>250 kt</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Project 57</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Plumbbob</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>12 kt</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>140 tons</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>0.5 tons</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>10 kt</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>37 kt</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>74 kt</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>17 kt</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>About 2 kt</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>10 kt</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>9.7 kt</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>08:00:00.00</td>
<td>37.052</td>
<td>-116.034</td>
<td>1202</td>
<td>Shaft</td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>19 kt</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>00:59:55.10</td>
<td>37.194</td>
<td>-116.034</td>
<td>- - - -</td>
<td>Tunnel</td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>17 kt</td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>22:35:00.00</td>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>4.7 kt</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>44 kt</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Tower</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>197 tons</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td>Safety Experiment</td>
<td>300 tons</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>1 kt</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>110 Fizeau</td>
<td>09/14/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
</tr>
<tr>
<td>111 Newton</td>
<td>09/16/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>112 Rainier</td>
<td>09/19/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b</td>
</tr>
<tr>
<td>113 Whitney</td>
<td>09/23/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
</tr>
<tr>
<td>114 Charleston</td>
<td>09/28/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>115 Morgan</td>
<td>10/07/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
</tr>
<tr>
<td>116 Pascal-C</td>
<td>12/06/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>U3e</td>
</tr>
<tr>
<td>117 Coulomb-C</td>
<td>12/09/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>S3i</td>
</tr>
<tr>
<td>118 Venus</td>
<td>02/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12d.01</td>
</tr>
<tr>
<td>119 Uranus</td>
<td>03/14/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c.01</td>
</tr>
</tbody>
</table>

**Operation Hardtack I**

Note: Three DoD high-altitude tests were conducted in the Pacific during Operation Hardtack I.

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 Yucca Operation Newsreel</td>
<td>04/28/1958</td>
<td>LANL/DoD</td>
<td>Pacific</td>
</tr>
<tr>
<td>North 12 degrees 37 minutes, East 163 degrees 01 minute High altitude -- 86,000 feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121 Cactus</td>
<td>05/05/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>122 Fir</td>
<td>05/11/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
</tr>
<tr>
<td>123 Butternut</td>
<td>05/11/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>124 Koa</td>
<td>05/12/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>125 Wahoo</td>
<td>05/16/1958</td>
<td>LANL/DoD</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>126 Holly</td>
<td>05/20/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>127 Nutmeg</td>
<td>05/21/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
</tr>
<tr>
<td>128 Yellowwood</td>
<td>05/26/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>129 Magnolia</td>
<td>05/26/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>130 Tobacco</td>
<td>05/30/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>131 Sycamore</td>
<td>05/31/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
</tr>
<tr>
<td>132 Rose</td>
<td>06/02/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>133 Umbrella</td>
<td>06/08/1958</td>
<td>LANL/DoD</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>134 Maple</td>
<td>06/10/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
</tr>
<tr>
<td>135 Aspen</td>
<td>06/14/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
</tr>
<tr>
<td>136 Walnut</td>
<td>06/14/1958</td>
<td>LANL</td>
<td>Eniwetok</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:59:59.45</td>
<td>37.196</td>
<td>-116.204</td>
<td>- - -</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22:15:00.00</td>
<td>37.050</td>
<td>-116.032</td>
<td>1202</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01:00:00.00</td>
<td>37.113</td>
<td>-116.115</td>
<td>- - -</td>
</tr>
<tr>
<td>22:00:00.00</td>
<td>37.113</td>
<td>-116.115</td>
<td>- - -</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operation Plumbbbob -- Continued**

**Operation Project 58**

**Operation Project 58 A**

**Operation Hardtack I**

*These tests were conducted as Operation Newsreel.*
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>137 Linden</td>
<td>06/18/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>138 Redwood</td>
<td>06/27/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>139 Elder</td>
<td>06/27/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>140 Oak</td>
<td>06/28/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>141 Hickory</td>
<td>06/29/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>142 Sequoia</td>
<td>07/01/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>143 Cedar</td>
<td>07/02/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>144 Dogwood</td>
<td>07/05/1958</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>145 Poplar</td>
<td>07/12/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>146 Scaevola</td>
<td>07/14/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>147 Pisonia</td>
<td>07/17/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>148 Juniper</td>
<td>07/22/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
</tr>
<tr>
<td>149 Olive</td>
<td>07/22/1958</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>150 Pine</td>
<td>07/26/1958</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>151 Teak</td>
<td>08/01/1958</td>
<td>LANL/DoD</td>
<td>Johnston Islandarea</td>
<td>-</td>
</tr>
<tr>
<td>152 Quince</td>
<td>08/06/1958</td>
<td>LLNL/DoD</td>
<td>Enewetak</td>
<td>-</td>
</tr>
<tr>
<td>153 Orange</td>
<td>08/12/1958</td>
<td>LANL/DoD</td>
<td>Johnston Islandarea</td>
<td>-</td>
</tr>
<tr>
<td>154 Fig</td>
<td>08/18/1958</td>
<td>LLNL/DoD</td>
<td>Enewetak</td>
<td>-</td>
</tr>
</tbody>
</table>

**Operation Argus**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>155 Argus I</td>
<td>08/27/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>-</td>
</tr>
<tr>
<td>156 Argus II</td>
<td>08/30/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>-</td>
</tr>
<tr>
<td>157 Argus III</td>
<td>09/06/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>-</td>
</tr>
</tbody>
</table>

**Operation Hardtack II**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>158 Otero</td>
<td>09/12/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3q</td>
</tr>
<tr>
<td>159 Bernalillo</td>
<td>09/17/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3n</td>
</tr>
<tr>
<td>160 Eddy</td>
<td>09/19/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operation Hardtack I -- Continued**

- Barge  Weapons Related  11 kt  137
- Barge  Weapons Related  412 kt  138
- Barge  Weapons Related  880 kt  139
- Barge  Weapons Related  8.9 Mt  140
- Barge  Weapons Related  14 kt  141
- Barge  Weapons Related  5.2 kt  142
- Barge  Weapons Related  220 kt  143
- Barge  Weapons Related  397 kt  144
- Barge  Weapons Related  9.3 Mt  145
- Barge  Safety Experiment  Zero  146
- Barge  Weapons Related  255 kt  147
- Barge  Weapons Related  65 kt  148
- Barge  Weapons Related  202 kt  149
- Barge  Weapons Related  2 Mt  150
- Rocket  Weapons Effects  3.8 Mt  151
- Surface  Weapons Related  Zero  152
- Rocket  Weapons Effects  3.8 Mt  153
- Surface  Weapons Related  20 tons  154

**Operation Argus**

- Rocket  Weapons Effects  1-2 kt  155
- Rocket  Weapons Effects  1-2 kt  156
- Rocket  Weapons Effects  1-2 kt  157

**Operation Hardtack II**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>20:00:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1202</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>38 tons 158</td>
</tr>
<tr>
<td>19:30:00.00</td>
<td>37.050</td>
<td>-116.034</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>15 tons 159</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>83 tons 160</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luna</td>
<td>09/21/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>09/23/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12f.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valencia</td>
<td>09/26/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mars</td>
<td>09/28/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12f.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mora</td>
<td>09/29/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colfax</td>
<td>10/05/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidalgo</td>
<td>10/05/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamalpais</td>
<td>10/08/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quay</td>
<td>10/10/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lea</td>
<td>10/13/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neptune</td>
<td>10/14/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamilton</td>
<td>10/15/1958</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logan</td>
<td>10/16/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dona Ana</td>
<td>10/16/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vesta</td>
<td>10/17/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rio Arriba</td>
<td>10/18/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Juan</td>
<td>10/20/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3p</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socorro</td>
<td>10/22/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrangell</td>
<td>10/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rushmore</td>
<td>10/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oberon</td>
<td>10/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catron</td>
<td>10/24/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juno</td>
<td>10/24/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>-------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>19:00:00.00</td>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>1.5 tons</td>
</tr>
<tr>
<td>22:00:00.00</td>
<td>37.113</td>
<td>-116.121</td>
<td>2021</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>Slight</td>
</tr>
<tr>
<td>20:00:00.00</td>
<td>37.050</td>
<td>-116.031</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>2 tons</td>
</tr>
<tr>
<td>00:00:00.00</td>
<td>37.193</td>
<td>-116.201</td>
<td>2021</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>13 tons</td>
</tr>
<tr>
<td>16:15:00.00</td>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>5.5 tons</td>
</tr>
<tr>
<td>16:15:00.00</td>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>2 kt</td>
</tr>
<tr>
<td>22:00:00.13</td>
<td>37.195</td>
<td>-116.201</td>
<td>2000</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>72 tons</td>
</tr>
<tr>
<td>22:00:00.13</td>
<td>37.195</td>
<td>-116.201</td>
<td>2000</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>79 tons</td>
</tr>
<tr>
<td>18:00:00.00</td>
<td>37.194</td>
<td>-116.201</td>
<td>2045</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>115 tons</td>
</tr>
<tr>
<td>18:00:00.00</td>
<td>37.194</td>
<td>-116.201</td>
<td>2045</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>1.4 kt</td>
</tr>
<tr>
<td>06:00:00.14</td>
<td>37.184</td>
<td>-116.202</td>
<td>- - -</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>5 kt</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Zero</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>6 kt</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>115 tons</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>188 tons</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Tower</td>
<td>Safety Experiment</td>
<td>Zero</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Tower</td>
<td>Safety Experiment</td>
<td>21 tons</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>1.7 tons</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceres</td>
<td>10/26/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Hardtack II -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanford</td>
<td>10/26/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De Baca</td>
<td>10/26/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaves (Chavez)</td>
<td>10/27/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evans</td>
<td>10/29/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humboldt</td>
<td>10/29/1958</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mazama</td>
<td>10/29/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Fe</td>
<td>10/30/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blanca</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ganymede</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titania</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Nougat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antler</td>
<td>09/15/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.03a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrew</td>
<td>09/16/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boomer</td>
<td>10/01/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chena</td>
<td>10/10/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mink</td>
<td>10/29/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher</td>
<td>12/03/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gnome</td>
<td>12/10/1961</td>
<td>LLNL</td>
<td>Carlsbad, New Mexico</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mad</td>
<td>12/13/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>00:00:00.15</td>
<td>37.195</td>
<td>-116.206</td>
<td>2000</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>55 tons</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.186</td>
<td>-116.203</td>
<td>2145</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>22 kt</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.188</td>
<td>-116.209</td>
<td>2254</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>2.6 kt</td>
</tr>
<tr>
<td>19:45:00.12</td>
<td>37.048</td>
<td>-116.034</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>21:30:00.12</td>
<td>37.048</td>
<td>-116.035</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.194</td>
<td>-116.208</td>
<td>2250</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:30:00.13</td>
<td>37.049</td>
<td>-116.032</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>23:04:59.63</td>
<td>37.046</td>
<td>-116.029</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>13.4 kt</td>
</tr>
<tr>
<td>19:00:00.00</td>
<td>32.264</td>
<td>-103.866</td>
<td>1013</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3 kt</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.127</td>
<td>-116.050</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>500 tons</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>203</td>
<td>12/17/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>204</td>
<td>12/22/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>01/09/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>206</td>
<td>01/18/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ao</td>
<td></td>
<td></td>
</tr>
<tr>
<td>207</td>
<td>01/30/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>208</td>
<td>02/08/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>209</td>
<td>02/09/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>210</td>
<td>02/15/1962</td>
<td>LANL/DoD/SNL</td>
<td>NTS</td>
<td>U15a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>02/19/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>02/19/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>213</td>
<td>02/23/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>02/24/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>03/01/1962</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3al</td>
<td></td>
<td></td>
</tr>
<tr>
<td>216</td>
<td>03/05/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U18a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>217</td>
<td>03/06/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>218</td>
<td>03/08/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>219</td>
<td>03/15/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>03/28/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>221</td>
<td>03/31/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>222</td>
<td>04/05/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3az</td>
<td></td>
<td></td>
</tr>
<tr>
<td>223</td>
<td>04/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>16:35:00.13</td>
<td>37.043</td>
<td>-116.026</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.195</td>
<td>-116.209</td>
<td>2242</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>150 tons</td>
</tr>
<tr>
<td>16:30:00.14</td>
<td>37.045</td>
<td>-116.036</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>5.1 kt</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.047</td>
<td>-116.035</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>6.4 kt</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.047</td>
<td>-116.040</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.127</td>
<td>-116.054</td>
<td>1295</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3.07 kt</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.044</td>
<td>-116.040</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>7.1 kt</td>
</tr>
<tr>
<td>18:00:00.10</td>
<td>37.226</td>
<td>-116.060</td>
<td>1532</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>5.7 kt</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.049</td>
<td>-116.030</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.9 kt</td>
</tr>
<tr>
<td>17:50:00.16</td>
<td>37.127</td>
<td>-116.038</td>
<td>1258</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.129</td>
<td>-116.049</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>11.9 kt</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.048</td>
<td>-116.033</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>19:10:00.09</td>
<td>37.041</td>
<td>-116.030</td>
<td>1196</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>9.5 kt</td>
</tr>
<tr>
<td>18:15:00.12</td>
<td>37.111</td>
<td>-116.366</td>
<td>1641</td>
<td>Crater</td>
<td>Weapons Effects</td>
<td>430 tons</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.048</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.21</td>
<td>37.122</td>
<td>-116.050</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>8.4 kt</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.044</td>
<td>-116.032</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.124</td>
<td>-116.035</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3.4 kt</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.047</td>
<td>-116.038</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.044</td>
<td>-116.024</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10.6 kt</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.118</td>
<td>-116.045</td>
<td>1248</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Nougat -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>224 Hudson</td>
<td>04/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>225 Platte</td>
<td>04/14/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12k.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>226 Dead</td>
<td>04/21/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Tests that were conducted during 1962 in Christmas and Johnson Island areas,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>227 Adobe</td>
<td>04/25/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>228 Aztec</td>
<td>04/27/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>229 Black</td>
<td>04/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9p</td>
<td></td>
<td></td>
</tr>
<tr>
<td>230 Arkansas</td>
<td>05/02/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>231 Questa</td>
<td>05/04/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>232 Frigate Bird</td>
<td>05/06/1962</td>
<td>LLNL/DoD</td>
<td>Pacific</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>233 Paca</td>
<td>05/07/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>234 Yukon</td>
<td>05/08/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>235 Mesilla</td>
<td>05/09/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>236 Arikaree</td>
<td>05/10/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>237 Muskegon</td>
<td>05/11/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>238 Swordfish</td>
<td>05/11/1962</td>
<td>LANL/DoD</td>
<td>Pacific</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>239 Encino</td>
<td>05/12/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>240 Aardvark</td>
<td>05/12/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3am(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>241 Swanee</td>
<td>05/14/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>242 Eel</td>
<td>05/19/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
July 1945 through September 1992

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00:00.16</td>
<td>37.127</td>
<td>-116.046</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.13</td>
<td>37.222</td>
<td>-116.158</td>
<td>1695</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>1.85 kt</td>
</tr>
<tr>
<td>18:40:00.16</td>
<td>37.119</td>
<td>-116.032</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.118</td>
<td>-116.039</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>19:33:00.14</td>
<td>37.047</td>
<td>-116.026</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>15:00:00.16</td>
<td>37.128</td>
<td>-116.049</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>19:00:00.10</td>
<td>37.065</td>
<td>-116.031</td>
<td>1214</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>40 kt</td>
</tr>
<tr>
<td>15:00:00.16</td>
<td>37.123</td>
<td>-116.048</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>4.5 kt</td>
</tr>
</tbody>
</table>

and elsewhere in the Pacific, were conducted as part of Operation Dominic.

- Airdrop  Weapons Related  190 kt  227
- Airdrop  Weapons Related  410 kt  228
- Airdrop  Weapons Related  1.09 Mt  230
- Airdrop  Weapons Related  670 kt  231
- Rocket  Weapons Related  200 to 1000 kt  232
- Airdrop  Weapons Related  100 kt  234
- Airdrop  Weapons Related  100 kt  235
- Airdrop  Weapons Related  50 kt  237
- Underwater  Weapons Effects  Low  238
- Airdrop  Weapons Related  500 kt  239
- Airdrop  Weapons Related  40 kt  240
- Airdrop  Weapons Related  97 kt  241
- Shaft  Weapons Related  4.5 kt  242
<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chetco</td>
<td>05/19/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>05/25/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9b</td>
</tr>
<tr>
<td>Tanana</td>
<td>05/25/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nambe</td>
<td>05/27/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raccoon</td>
<td>06/01/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ajs</td>
</tr>
<tr>
<td>Packrat</td>
<td>06/06/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aw</td>
</tr>
<tr>
<td>Alma</td>
<td>06/08/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truckee</td>
<td>06/09/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yeso</td>
<td>06/10/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harlem</td>
<td>06/12/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des Moines</td>
<td>06/13/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12j;01</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rinconada</td>
<td>06/15/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dulce</td>
<td>06/17/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petit</td>
<td>06/19/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daman I</td>
<td>06/21/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3be</td>
</tr>
<tr>
<td>Otowi</td>
<td>06/22/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bighorn</td>
<td>06/27/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haymaker</td>
<td>06/27/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3au(s)</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marshmallow</td>
<td>06/28/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U16a</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluestone</td>
<td>06/30/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td></td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacramento</td>
<td>06/30/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9v</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.125</td>
<td>-116.053</td>
<td>1253</td>
<td>Airdrop</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td></td>
<td></td>
<td></td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.14</td>
<td>37.046</td>
<td>-116.035</td>
<td>1199</td>
<td>Airdrop</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.046</td>
<td>-116.030</td>
<td>1199</td>
<td>Airdrop</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.046</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:00:00.12</td>
<td>37.222</td>
<td>-116.163</td>
<td>1696</td>
<td>Tunnel</td>
</tr>
<tr>
<td>21:00:00.12</td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td>21:00:00.12</td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td>21:00:00.12</td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
</tr>
<tr>
<td>17:00:00.13</td>
<td>37.043</td>
<td>-116.031</td>
<td>1197</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.12</td>
<td>37.042</td>
<td>-116.036</td>
<td>1196</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.11</td>
<td>37.009</td>
<td>-116.202</td>
<td>2241</td>
<td>Tunnel</td>
</tr>
<tr>
<td>21:30:00.16</td>
<td>37.117</td>
<td>-116.048</td>
<td>1246</td>
<td>Shaft</td>
</tr>
</tbody>
</table>
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedan</td>
<td>07/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10h</td>
</tr>
<tr>
<td>Crater 1280 feet diameter, 320 feet deep Thermonuclear device with fission yield less than 30% Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Storax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Four DoD weapons effects tests were conducted at the Nevada Test Site in July of 1962.

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Feller II</td>
<td>07/07/1962</td>
<td>SNL/DoD</td>
<td>NTS</td>
<td>Area 18</td>
</tr>
<tr>
<td>Operation Sunbeam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly above ground Test of Davy Crockett Radioactivity not detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Five DoD high-altitude weapons effects tests were conducted during Operation Dominic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starfish Prime</td>
<td>07/09/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - -</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude -- 400 kilometers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunset</td>
<td>07/10/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pamlico</td>
<td>07/11/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnnie Boy</td>
<td>07/11/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>Area 18</td>
</tr>
<tr>
<td>Operation Sunbeam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly below ground Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merrimac</td>
<td>07/13/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3bd</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Boy</td>
<td>07/14/1962</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
</tr>
<tr>
<td>Operation Sunbeam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly above ground Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little Feller I</td>
<td>07/17/1962</td>
<td>SNL/DoD</td>
<td>NTS</td>
<td>Area 18</td>
</tr>
<tr>
<td>Operation Sunbeam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly above ground Test of Davy Crockett Last atmospheric test conducted at the Nevada Test Site Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wichita</td>
<td>07/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9y</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>York</td>
<td>08/24/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9z</td>
</tr>
<tr>
<td>Bobac</td>
<td>08/24/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bl</td>
</tr>
<tr>
<td>Raritan</td>
<td>09/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9u</td>
</tr>
<tr>
<td>Hyrax</td>
<td>09/14/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bh</td>
</tr>
<tr>
<td>Peba</td>
<td>09/20/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bb</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17:00:00.15</td>
<td>37.177</td>
<td>-116.046</td>
<td>1289</td>
<td>Crater</td>
</tr>
<tr>
<td></td>
<td>These tests were conducted as Operation Sunbeam.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface Weapons Effects</td>
<td>Low</td>
<td>265</td>
<td></td>
</tr>
<tr>
<td>16:45:00.09</td>
<td>37.122</td>
<td>-116.334</td>
<td>1544</td>
<td>Crater</td>
</tr>
<tr>
<td>16:00:00.15</td>
<td>37.055</td>
<td>-116.034</td>
<td>1205</td>
<td>Shaft</td>
</tr>
<tr>
<td></td>
<td>Tower Weapons Effects</td>
<td>Low</td>
<td>271</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface Weapons Effects</td>
<td>Low</td>
<td>272</td>
<td></td>
</tr>
<tr>
<td>21:00:00.16</td>
<td>37.130</td>
<td>-116.057</td>
<td>1265</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.119</td>
<td>-116.040</td>
<td>1256</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.13</td>
<td>37.046</td>
<td>-116.025</td>
<td>1199</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.20</td>
<td>37.130</td>
<td>-116.046</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:10:00.12</td>
<td>37.044</td>
<td>-116.022</td>
<td>1197</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.055</td>
<td>-116.030</td>
<td>1205</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Operation Storax -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>279 Allegheny</td>
<td>09/29/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9x</td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>280 Androscoggin</td>
<td>10/02/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>281 Mississippi</td>
<td>10/05/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ad</td>
</tr>
<tr>
<td>282 Bumping</td>
<td>10/06/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>283 Roanoke</td>
<td>10/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9q</td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>284 Wolverine</td>
<td>10/12/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3av</td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>285 Chama</td>
<td>10/18/1962</td>
<td>LANL</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>286 Tioga</td>
<td>10/18/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9f</td>
</tr>
<tr>
<td>287 Bandicoot</td>
<td>10/19/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bj</td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>288 Checkmate</td>
<td>10/20/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude -- tens of kilometers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>289 Bluegill 3 Prime</td>
<td>10/26/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude -- tens of kilometers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290 Santee</td>
<td>10/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10f</td>
</tr>
<tr>
<td>291 Calamity</td>
<td>10/27/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>292 Housatonic</td>
<td>10/30/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>293 Kingfish</td>
<td>11/01/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude -- tens of kilometers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>294 Tightrope</td>
<td>11/04/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude -- tens of kilometers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>295 St. Lawrence</td>
<td>11/09/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2b</td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>296 Gundii</td>
<td>11/15/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bm</td>
</tr>
<tr>
<td>297 Anacostia</td>
<td>11/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9i</td>
</tr>
<tr>
<td></td>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>298 Taunton</td>
<td>12/04/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aa</td>
</tr>
<tr>
<td>299 Tendrac</td>
<td>12/07/1962</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3ba</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17:00:00.15</td>
<td>37.117</td>
<td>-116.034</td>
<td>1271</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.16</td>
<td>37.139</td>
<td>-116.051</td>
<td>1264</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.16</td>
<td>37.123</td>
<td>-116.052</td>
<td>1252</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.049</td>
<td>-116.033</td>
<td>1200</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.129</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.08</td>
<td>37.039</td>
<td>-116.022</td>
<td>1195</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.149</td>
<td>-116.054</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.08</td>
<td>37.042</td>
<td>-116.025</td>
<td>1195</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.164</td>
<td>-116.074</td>
<td>1309</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.15</td>
<td>37.128</td>
<td>-116.051</td>
<td>1256</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.10</td>
<td>37.052</td>
<td>-116.030</td>
<td>1202</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.14</td>
<td>37.123</td>
<td>-116.030</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.08</td>
<td>37.042</td>
<td>-116.025</td>
<td>1195</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.10</td>
<td>37.052</td>
<td>-116.030</td>
<td>1202</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Storax -- Continued**
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>Madison</td>
<td>12/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>301</td>
<td>Numbat</td>
<td>12/12/1962</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>302</td>
<td>Manatee</td>
<td>12/14/1962</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>303</td>
<td>Casselman</td>
<td>02/08/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>304</td>
<td>Acushi</td>
<td>02/08/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>305</td>
<td>Ferret</td>
<td>02/08/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>306</td>
<td>Hatchie</td>
<td>02/08/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>307</td>
<td>Chipmunk</td>
<td>02/15/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>308</td>
<td>Kaweah</td>
<td>02/21/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>309</td>
<td>Carmel</td>
<td>02/21/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>310</td>
<td>Jerboa</td>
<td>03/01/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>311</td>
<td>Toyah</td>
<td>03/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>312</td>
<td>Gerbil</td>
<td>03/29/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>313</td>
<td>Ferret Prime</td>
<td>04/05/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>314</td>
<td>Coypu</td>
<td>04/10/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>315</td>
<td>Cumberland</td>
<td>04/11/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>316</td>
<td>Kootanai</td>
<td>04/24/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>317</td>
<td>Paisano</td>
<td>04/24/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>318</td>
<td>Gundi Prime</td>
<td>05/09/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
</tbody>
</table>

**Note:** Four storage-transportation tests were conducted on the Nellis Air Force Range.

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>319</td>
<td>Double Tracks</td>
<td>05/15/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
</tr>
<tr>
<td></td>
<td>Operation Roller Coaster</td>
<td></td>
<td></td>
<td>Radioactivity detected offsite</td>
</tr>
<tr>
<td>320</td>
<td>Harkee</td>
<td>05/17/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>321</td>
<td>Tejon</td>
<td>05/17/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>322</td>
<td>Stones</td>
<td>05/22/1963</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>323</td>
<td>Clean Slate I</td>
<td>05/25/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
</tr>
<tr>
<td></td>
<td>Operation Roller Coaster</td>
<td></td>
<td></td>
<td>Radioactivity detected offsite</td>
</tr>
<tr>
<td>324</td>
<td>Pleasant</td>
<td>05/29/1963</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>325</td>
<td>Clean Slate II</td>
<td>05/31/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
</tr>
<tr>
<td></td>
<td>Operation Roller Coaster</td>
<td></td>
<td></td>
<td>Radioactivity not detected offsite</td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:25:00.12</td>
<td>37.172</td>
<td>-116.203</td>
<td>2252</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Low 300</td>
</tr>
<tr>
<td>18:45:00.12</td>
<td>37.046</td>
<td>-116.016</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 301</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.124</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 302</td>
</tr>
<tr>
<td>16:00:00.16</td>
<td>37.149</td>
<td>-116.053</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 303</td>
</tr>
<tr>
<td>18:30:00.14</td>
<td>37.046</td>
<td>-116.022</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 304</td>
</tr>
<tr>
<td>18:30:00.13</td>
<td>37.058</td>
<td>-116.030</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 305</td>
</tr>
<tr>
<td>16:00:01.15</td>
<td>37.126</td>
<td>-116.040</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 306</td>
</tr>
<tr>
<td>17:00:00.13</td>
<td>37.049</td>
<td>-116.033</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low 307</td>
</tr>
<tr>
<td>19:47:00.14</td>
<td>37.120</td>
<td>-116.047</td>
<td>1249</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3 kt 308</td>
</tr>
<tr>
<td>19:47:08.63</td>
<td>37.155</td>
<td>-116.081</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 309</td>
</tr>
<tr>
<td>19:00:00.12</td>
<td>37.044</td>
<td>-116.027</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 310</td>
</tr>
<tr>
<td>15:49:00.12</td>
<td>37.042</td>
<td>-116.019</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 312</td>
</tr>
<tr>
<td>17:52:00.13</td>
<td>37.037</td>
<td>-116.025</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 313</td>
</tr>
<tr>
<td>16:01:30.12</td>
<td>37.049</td>
<td>-116.031</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low 314</td>
</tr>
<tr>
<td>16:03:00.16</td>
<td>37.157</td>
<td>-116.072</td>
<td>1299</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 315</td>
</tr>
<tr>
<td>16:09:30.14</td>
<td>37.121</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 316</td>
</tr>
<tr>
<td>16:09:30.14</td>
<td>37.120</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 317</td>
</tr>
<tr>
<td>18:19:00.00</td>
<td>37.049</td>
<td>-116.016</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 318</td>
</tr>
</tbody>
</table>

*These tests were conducted during May and June 1963 as the joint US-UK Operation Roller Coaster.*
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Storax -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>326 Yuba</td>
<td>06/05/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.10</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>327 Hutia</td>
<td>06/06/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bc</td>
</tr>
<tr>
<td>328 Apshapa</td>
<td>06/06/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ai</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>329 Clean Slate III</td>
<td>06/09/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
<td>- - - -</td>
</tr>
<tr>
<td>Operation Roller Coaster</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plutonium dispersal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>330 Mataco</td>
<td>06/14/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bk</td>
</tr>
<tr>
<td>331 Kennebec</td>
<td>06/25/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2af</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Niblick</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332 Pekan</td>
<td>08/12/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bw</td>
</tr>
<tr>
<td>333 Satsop</td>
<td>08/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2g</td>
</tr>
<tr>
<td>334 Kohocon</td>
<td>08/23/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ak</td>
</tr>
<tr>
<td>Natches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>335 Ahtanum</td>
<td>09/13/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2l</td>
</tr>
<tr>
<td>336 Bilby</td>
<td>09/13/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cn</td>
</tr>
<tr>
<td>First underground test reported felt in Las Vegas, Nevada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>337 Carp</td>
<td>09/27/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cb</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338 Narraguagus</td>
<td>09/27/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2f</td>
</tr>
<tr>
<td>339 Grunion</td>
<td>10/11/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bz</td>
</tr>
<tr>
<td>340 Tornillo</td>
<td>10/11/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aq</td>
</tr>
<tr>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>341 Clearwater</td>
<td>10/16/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12q</td>
</tr>
<tr>
<td>342 Mullet</td>
<td>10/17/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ag</td>
</tr>
<tr>
<td>343 Shoal</td>
<td>10/26/1963</td>
<td>LANL/DoD</td>
<td>Fallon, Nevada</td>
<td>- - - -</td>
</tr>
<tr>
<td>Nuclear test detection-research experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>344 Anchovy</td>
<td>11/14/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bq</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>345 Mustang</td>
<td>11/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9at</td>
</tr>
<tr>
<td>346 Greys</td>
<td>11/22/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ax</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17:00:00.12</td>
<td>37.197</td>
<td>-116.210</td>
<td>2240</td>
<td>Tunnel</td>
</tr>
<tr>
<td>14:00:00.13</td>
<td>37.044</td>
<td>-116.037</td>
<td>1198</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:58:00.15</td>
<td>37.125</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:10:00.13</td>
<td>37.046</td>
<td>-116.019</td>
<td>1200</td>
<td>Shaft</td>
</tr>
<tr>
<td>23:00:00.15</td>
<td>37.131</td>
<td>-116.069</td>
<td>1276</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Niblick**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>23:45:00.13</td>
<td>37.042</td>
<td>-116.017</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>332</td>
</tr>
<tr>
<td>13:00:00.15</td>
<td>37.154</td>
<td>-116.077</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>333</td>
</tr>
<tr>
<td>13:20:00.15</td>
<td>37.125</td>
<td>-116.036</td>
<td>- - -</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>334</td>
</tr>
<tr>
<td>13:30:00.14</td>
<td>37.125</td>
<td>-116.036</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>334</td>
</tr>
<tr>
<td>13:53:00.15</td>
<td>37.163</td>
<td>-116.082</td>
<td>1320</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>335</td>
</tr>
<tr>
<td>17:00:00.13</td>
<td>37.060</td>
<td>-116.023</td>
<td>1215</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>249 kt</td>
<td>336</td>
</tr>
<tr>
<td>14:20:00.13</td>
<td>37.037</td>
<td>-116.017</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>337</td>
</tr>
<tr>
<td>17:30:00.15</td>
<td>37.155</td>
<td>-116.074</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>338</td>
</tr>
<tr>
<td>14:00:00.11</td>
<td>37.037</td>
<td>-116.022</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>339</td>
</tr>
<tr>
<td>21:00:00.16</td>
<td>37.119</td>
<td>-116.035</td>
<td>1267</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>380 tons</td>
<td>340</td>
</tr>
<tr>
<td>17:00:00.14</td>
<td>37.198</td>
<td>-116.230</td>
<td>2233</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate</td>
<td>341</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.131</td>
<td>-116.068</td>
<td>1275</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
<td>342</td>
</tr>
<tr>
<td>17:00:00.10</td>
<td>39.200</td>
<td>-118.381</td>
<td>1574</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>12 kt</td>
<td>343</td>
</tr>
<tr>
<td>16:00:00.12</td>
<td>37.039</td>
<td>-116.019</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>344</td>
</tr>
<tr>
<td>15:00:00.15</td>
<td>37.132</td>
<td>-116.048</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>345</td>
</tr>
<tr>
<td>17:30:00.15</td>
<td>37.119</td>
<td>-116.046</td>
<td>1248</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate</td>
<td>346</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Niblick -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>347 Barracuda</td>
<td>12/04/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12/04/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sardine</td>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>348 Eagle</td>
<td>12/12/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9av</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>349 Tuna</td>
<td>12/20/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3de</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350 Fore</td>
<td>01/16/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ao</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>351 Oconto</td>
<td>01/23/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>352 Club</td>
<td>01/30/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2aa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>353 Solendon</td>
<td>02/12/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>354 Bunker</td>
<td>02/13/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>355 Bonefish</td>
<td>02/18/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>356 Mackerel</td>
<td>02/18/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U4b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>357 Kickitat</td>
<td>02/20/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10e</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>358 Handicap</td>
<td>03/12/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>359 Pike</td>
<td>3/13/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>360 Hook</td>
<td>04/14/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>361 Sturgeon</td>
<td>04/15/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>362 Bogey</td>
<td>04/17/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9au</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>363 Turf</td>
<td>04/24/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10c</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>364 Pipefish</td>
<td>04/29/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3co</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>-------</td>
<td>---------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>16:38:30.13</td>
<td>37.044</td>
<td>-116.013</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 347</td>
<td></td>
</tr>
<tr>
<td>16:38:30.13</td>
<td>37.040</td>
<td>-116.030</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>16:02:00.15</td>
<td>37.131</td>
<td>-116.045</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>5.3 kt 348</td>
<td></td>
</tr>
<tr>
<td>15:24:00.13</td>
<td>37.053</td>
<td>-116.034</td>
<td>1203</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low 349</td>
<td></td>
</tr>
<tr>
<td>16:00:00.15</td>
<td>37.142</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 350</td>
<td></td>
</tr>
<tr>
<td>16:00:00.15</td>
<td>37.126</td>
<td>-116.037</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10.5 kt 351</td>
<td></td>
</tr>
<tr>
<td>16:00:00.15</td>
<td>37.136</td>
<td>-116.072</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 352</td>
<td></td>
</tr>
<tr>
<td>15:38:00.12</td>
<td>37.057</td>
<td>-116.030</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 353</td>
<td></td>
</tr>
<tr>
<td>15:30:00.15</td>
<td>37.132</td>
<td>-116.033</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 354</td>
<td></td>
</tr>
<tr>
<td>15:37:37.12</td>
<td>37.096</td>
<td>-116.052</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 356</td>
<td></td>
</tr>
<tr>
<td>15:30:00.15</td>
<td>37.151</td>
<td>-116.041</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 357</td>
<td></td>
</tr>
<tr>
<td>15:00:00.01</td>
<td>37.130</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 358</td>
<td></td>
</tr>
<tr>
<td>16:02:00.12</td>
<td>37.050</td>
<td>-116.012</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 359</td>
<td></td>
</tr>
<tr>
<td>14:40:00.15</td>
<td>37.129</td>
<td>-116.031</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 360</td>
<td></td>
</tr>
<tr>
<td>14:30:00.12</td>
<td>37.044</td>
<td>-116.019</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 361</td>
<td></td>
</tr>
<tr>
<td>15:29:52.28</td>
<td>37.119</td>
<td>-116.035</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 362</td>
<td></td>
</tr>
<tr>
<td>20:10:00.15</td>
<td>37.150</td>
<td>-116.056</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 363</td>
<td></td>
</tr>
<tr>
<td>20:47:00.12</td>
<td>37.040</td>
<td>-116.028</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 364</td>
<td></td>
</tr>
</tbody>
</table>
## United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
<td>(mm/dd/yyyy)</td>
<td>(GMT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Niblick -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>365 Driver</td>
<td>05/07/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ar</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>366 Backswing</td>
<td>05/14/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aw</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>367 Minnow</td>
<td>05/15/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cv</td>
</tr>
<tr>
<td>368 Ace</td>
<td>06/11/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2n</td>
</tr>
<tr>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>369 Bitterling</td>
<td>06/12/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cu</td>
</tr>
<tr>
<td>370 Duffer</td>
<td>06/18/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ds</td>
</tr>
<tr>
<td>371 Fade</td>
<td>06/25/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9be</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>372 Dub</td>
<td>06/30/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10a</td>
</tr>
<tr>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Whetstone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>373 Bye</td>
<td>07/16/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10i</td>
</tr>
<tr>
<td>374 Cormorant</td>
<td>07/17/1964</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3df</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>375 Links</td>
<td>07/23/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bf</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>376 Trogon</td>
<td>07/24/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dj</td>
</tr>
<tr>
<td>377 Alva</td>
<td>08/19/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2j</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected offsite by aircraft only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>378 Canvasback</td>
<td>08/22/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cp</td>
</tr>
<tr>
<td>379 Player</td>
<td>08/27/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cc</td>
</tr>
<tr>
<td>380 Haddock</td>
<td>08/28/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dl</td>
</tr>
<tr>
<td>381 Guanay</td>
<td>09/04/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3di</td>
</tr>
<tr>
<td>382 Spoon</td>
<td>09/11/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bd</td>
</tr>
<tr>
<td>383 Courser</td>
<td>09/25/1964</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3do</td>
</tr>
<tr>
<td>384 Auk</td>
<td>10/02/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U7b</td>
</tr>
<tr>
<td>385 Par</td>
<td>10/09/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2p</td>
</tr>
<tr>
<td>Isotope production and explosive development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>386 Barbel</td>
<td>10/16/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bx</td>
</tr>
<tr>
<td>Turnstone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>13:00:00.15</td>
<td>37.120</td>
<td>-116.041</td>
<td>1253</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.15</td>
<td>37.117</td>
<td>-116.040</td>
<td>1257</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:15:00.12</td>
<td>37.042</td>
<td>-116.013</td>
<td>1199</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:45:00.15</td>
<td>37.149</td>
<td>-116.077</td>
<td>1300</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:01:00.10</td>
<td>37.039</td>
<td>-116.013</td>
<td>1196</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.20</td>
<td>37.166</td>
<td>-116.039</td>
<td>1288</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.14</td>
<td>37.111</td>
<td>-116.030</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:33:00.14</td>
<td>37.174</td>
<td>-116.057</td>
<td>1282</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:15:00.15</td>
<td>37.182</td>
<td>-116.046</td>
<td>1295</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:18:30.03</td>
<td>37.018</td>
<td>-116.030</td>
<td>1184</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.15</td>
<td>37.114</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:30:00.04</td>
<td>37.046</td>
<td>-116.013</td>
<td>1204</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.14</td>
<td>37.159</td>
<td>-116.084</td>
<td>1320</td>
<td>Shaft</td>
</tr>
<tr>
<td>22:17:00.06</td>
<td>37.065</td>
<td>-116.016</td>
<td>1226</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.15</td>
<td>37.117</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:06:00.04</td>
<td>37.067</td>
<td>-116.023</td>
<td>1222</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:15:00.08</td>
<td>37.018</td>
<td>-116.024</td>
<td>1184</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.10</td>
<td>37.114</td>
<td>-116.026</td>
<td>1289</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:02:00.03</td>
<td>37.072</td>
<td>-116.016</td>
<td>1237</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:03:00.04</td>
<td>37.078</td>
<td>-116.009</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.12</td>
<td>37.151</td>
<td>-116.078</td>
<td>1304</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:59:30.04</td>
<td>37.039</td>
<td>-116.017</td>
<td>1194</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------</td>
<td>---------------</td>
<td>------------------</td>
<td>------------</td>
</tr>
<tr>
<td>369</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Whetstone -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>387</td>
<td>Salmon</td>
<td>10/22/1964</td>
<td>LLNL/DoD</td>
<td>Hattiesburg, Mississippi - - - -</td>
</tr>
<tr>
<td>388</td>
<td>Garden</td>
<td>10/23/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>389</td>
<td>Forest</td>
<td>10/31/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>390</td>
<td>Handcar</td>
<td>11/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>391</td>
<td>Crepe</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>392</td>
<td>Drill (Source-Lower)</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td></td>
<td>Drill (Target-Upper)</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>393</td>
<td>Parrot</td>
<td>12/16/1964</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>394</td>
<td>Mudpack</td>
<td>12/16/1964</td>
<td>LLNL/DoD</td>
<td>NTS</td>
</tr>
<tr>
<td>395</td>
<td>Cassowary</td>
<td>12/16/1964</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td></td>
<td>Hoopoe</td>
<td>12/16/1964</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>396</td>
<td>Sulky</td>
<td>12/18/1964</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>397</td>
<td>Wool</td>
<td>01/14/1965</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>398</td>
<td>Tern</td>
<td>01/29/1965</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>399</td>
<td>Cashmere</td>
<td>02/04/1965</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>400</td>
<td>Alpaca</td>
<td>02/12/1965</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>401</td>
<td>Merlin</td>
<td>02/16/1965</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>402</td>
<td>Wishbone</td>
<td>02/18/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
</tr>
<tr>
<td>403</td>
<td>Seersucker</td>
<td>02/19/1965</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>July 1945 through September 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00:00.00</td>
<td>31.142</td>
<td>-89.570</td>
<td>46</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.94</td>
<td>37.117</td>
<td>-116.032</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:04:58.61</td>
<td>37.107</td>
<td>-116.033</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.11</td>
<td>37.174</td>
<td>-116.068</td>
<td>1307</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:15:00.10</td>
<td>37.114</td>
<td>-116.054</td>
<td>1252</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:15:00.16</td>
<td>37.134</td>
<td>-116.071</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:15:00.16</td>
<td>37.134</td>
<td>-116.071</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.04</td>
<td>37.035</td>
<td>-116.013</td>
<td>1192</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:10:00.10</td>
<td>37.178</td>
<td>-116.068</td>
<td>1310</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.07</td>
<td>37.040</td>
<td>-116.025</td>
<td>1194</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.07</td>
<td>37.048</td>
<td>-116.034</td>
<td>1200</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:35:00.09</td>
<td>37.083</td>
<td>-116.343</td>
<td>1597</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.14</td>
<td>37.119</td>
<td>-116.026</td>
<td>1287</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:22:00.03</td>
<td>37.045</td>
<td>-116.014</td>
<td>1202</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.11</td>
<td>37.131</td>
<td>-116.062</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:30:00.04</td>
<td>37.052</td>
<td>-116.025</td>
<td>1203</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:18:47.15</td>
<td>36.818</td>
<td>-115.950</td>
<td>913</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:28:54.11</td>
<td>37.117</td>
<td>-116.032</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Wagtail</td>
<td>03/03/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3an</td>
</tr>
<tr>
<td>Suede</td>
<td>03/20/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bk</td>
</tr>
<tr>
<td>Cup</td>
<td>03/26/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cb</td>
</tr>
<tr>
<td>Kestrel</td>
<td>04/05/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dd</td>
</tr>
<tr>
<td>Palanquin</td>
<td>04/14/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20k</td>
</tr>
<tr>
<td>Gum Drop</td>
<td>04/21/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U16a.02</td>
</tr>
<tr>
<td>Chenille</td>
<td>04/22/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bg</td>
</tr>
<tr>
<td>Muscovy</td>
<td>04/23/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dx</td>
</tr>
<tr>
<td>Tee</td>
<td>05/07/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ab</td>
</tr>
<tr>
<td>Buteo</td>
<td>05/12/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U20a</td>
</tr>
<tr>
<td>Scaup</td>
<td>05/14/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3da(s)</td>
</tr>
<tr>
<td>Cambric</td>
<td>05/14/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U5e</td>
</tr>
<tr>
<td>Tweed</td>
<td>05/21/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bn</td>
</tr>
<tr>
<td>Petrel</td>
<td>06/11/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dy</td>
</tr>
<tr>
<td>Organdy</td>
<td>06/11/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bo</td>
</tr>
<tr>
<td>Diluted Waters</td>
<td>06/16/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U5b</td>
</tr>
<tr>
<td>Tiny Tot</td>
<td>06/17/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U15e</td>
</tr>
<tr>
<td>Izzer</td>
<td>07/16/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bp</td>
</tr>
<tr>
<td>Pongee</td>
<td>07/22/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ah</td>
</tr>
<tr>
<td>Bronze</td>
<td>07/23/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U7f</td>
</tr>
<tr>
<td>Mauve</td>
<td>08/06/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dp</td>
</tr>
<tr>
<td>Ticking</td>
<td>08/21/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bj</td>
</tr>
<tr>
<td>Centaur</td>
<td>08/27/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ak</td>
</tr>
<tr>
<td>Moa</td>
<td>09/01/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ed</td>
</tr>
<tr>
<td>Screammer</td>
<td>09/01/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dg</td>
</tr>
</tbody>
</table>

**Operation Whetstone -- Continued**

**Operation Flintlock**
<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>19:13:00.03</td>
<td>37.064</td>
<td>-116.038</td>
<td>1210</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:30:49.10</td>
<td>37.115</td>
<td>-116.027</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:34:08.16</td>
<td>37.148</td>
<td>-116.044</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>21:00:00.04</td>
<td>37.026</td>
<td>-116.024</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:14:00.10</td>
<td>37.280</td>
<td>-116.524</td>
<td>1861</td>
<td>Crater</td>
<td>Plowshare</td>
<td>4.3 kt</td>
</tr>
<tr>
<td>22:00:00.03</td>
<td>37.007</td>
<td>-116.203</td>
<td>1931</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:39:00.10</td>
<td>37.111</td>
<td>-116.031</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:44:00.04</td>
<td>37.017</td>
<td>-115.996</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:47:11.15</td>
<td>37.140</td>
<td>-116.068</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7 kt</td>
</tr>
<tr>
<td>18:15:00.10</td>
<td>37.243</td>
<td>-116.432</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:32:36.23</td>
<td>37.059</td>
<td>-116.011</td>
<td>1222</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:57:52.15</td>
<td>36.823</td>
<td>-115.968</td>
<td>929</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>750 tons</td>
</tr>
<tr>
<td>13:08:52.11</td>
<td>37.119</td>
<td>-116.029</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:45:00.04</td>
<td>37.043</td>
<td>-116.018</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.3 kt</td>
</tr>
<tr>
<td>20:28:37.11</td>
<td>37.116</td>
<td>-116.024</td>
<td>1294</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.15</td>
<td>36.818</td>
<td>-115.957</td>
<td>916</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.09</td>
<td>37.223</td>
<td>-116.058</td>
<td>- - -</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

**Operation Whetstone -- Continued**

**Operation Flintlock**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:04:24.10</td>
<td>37.115</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:21:08.11</td>
<td>37.132</td>
<td>-116.068</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.098</td>
<td>-116.034</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>17:23:30.04</td>
<td>37.018</td>
<td>-116.041</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:43:08.15</td>
<td>37.113</td>
<td>-116.027</td>
<td>1288</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:08:00.04</td>
<td>37.037</td>
<td>-116.015</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:08:00.04</td>
<td>37.023</td>
<td>-116.010</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>--------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Flintlock -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428 Charcoal</td>
<td>09/10/1965</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>429 Elkhart</td>
<td>09/17/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>430 Long Shot</td>
<td>10/29/1965</td>
<td>LANL/DoD</td>
<td>Amchitka, Alaska</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>431 Sepia</td>
<td>11/12/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3en</td>
<td></td>
<td></td>
</tr>
<tr>
<td>432 Kermet</td>
<td>11/23/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>433 Corduroy</td>
<td>12/03/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>434 Emerson</td>
<td>12/16/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2al</td>
<td></td>
<td></td>
</tr>
<tr>
<td>435 Buff</td>
<td>12/16/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>436 Maxwell</td>
<td>01/13/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9br</td>
<td></td>
<td></td>
</tr>
<tr>
<td>437 Lampblack</td>
<td>01/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>438 Sienna</td>
<td>01/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>439 Dovekie</td>
<td>01/21/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>440 Reo</td>
<td>01/22/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>441 Plaid II</td>
<td>02/03/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>442 Rex</td>
<td>02/24/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20h(e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>443 Red Hot</td>
<td>03/05/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12g.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>444 Finfoot</td>
<td>03/07/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3du</td>
<td></td>
<td></td>
</tr>
<tr>
<td>445 Clymer</td>
<td>03/12/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>446 Purple</td>
<td>03/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>447 Templar</td>
<td>03/24/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>448 Lime</td>
<td>04/01/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>449 Stutz</td>
<td>04/06/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ca</td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 Tomato</td>
<td>04/07/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>451 Duryea</td>
<td>04/14/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20a1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>452 Fenton</td>
<td>04/23/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2m1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>17:12:00.03</td>
<td>37.078</td>
<td>-116.018</td>
<td>1245</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:08:23.10</td>
<td>37.111</td>
<td>-116.035</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:00:00.08</td>
<td>51.424</td>
<td>179.179</td>
<td>42</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>80 kt</td>
</tr>
<tr>
<td>18:00:00.05</td>
<td>37.050</td>
<td>-116.023</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:17:32.10</td>
<td>37.162</td>
<td>-116.072</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:13:02.10</td>
<td>37.165</td>
<td>-116.053</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:39:18.15</td>
<td>37.141</td>
<td>-116.064</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:15:00.04</td>
<td>37.073</td>
<td>-116.030</td>
<td>1223</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:37:43.10</td>
<td>37.116</td>
<td>-116.028</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:35:00.04</td>
<td>37.092</td>
<td>-116.020</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>18:04:13.11</td>
<td>37.144</td>
<td>-116.053</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:00:00.04</td>
<td>37.009</td>
<td>-116.010</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:40:00.04</td>
<td>37.103</td>
<td>-116.021</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:57:17.10</td>
<td>37.139</td>
<td>-116.142</td>
<td>1458</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:27:30.04</td>
<td>37.017</td>
<td>-115.993</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:13:43.10</td>
<td>37.243</td>
<td>-116.432</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>70 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pin Stripe</td>
<td>04/25/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U11b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pin Stripe</td>
<td>04/29/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ec</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ochre</td>
<td>05/04/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traveler</td>
<td>05/05/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclamen</td>
<td>05/06/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U19d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included heavy element experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tapestry</td>
<td>05/12/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2an</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ochre</td>
<td>05/13/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piranha</td>
<td>05/19/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discus Thrower</td>
<td>05/27/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U8a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pile Driver</td>
<td>06/02/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U15a.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan</td>
<td>06/03/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puce</td>
<td>06/10/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Play</td>
<td>06/15/1966</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U16a.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kankake</td>
<td>06/15/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10p</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vulcan</td>
<td>06/25/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halfbeak</td>
<td>06/30/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U19b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavation device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saxon</td>
<td>07/28/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rovena</td>
<td>08/10/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangerine</td>
<td>08/12/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derringer</td>
<td>09/12/1966</td>
<td>LANL/SNL/DoD</td>
<td>NTS</td>
<td>U5i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daquiri</td>
<td>09/23/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newark</td>
<td>09/29/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10u</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khaki</td>
<td>10/15/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3et</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simms</td>
<td>11/05/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10w</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavation device development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ajax</td>
<td>11/11/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9al</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>18:38:00.14</td>
<td>36.887</td>
<td>-115.942</td>
<td>1066</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:33:00.04</td>
<td>37.044</td>
<td>-116.023</td>
<td>1196</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.051</td>
<td>-116.039</td>
<td>1203</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>12 kt</td>
</tr>
<tr>
<td>15:00:00.08</td>
<td>37.348</td>
<td>-116.323</td>
<td>2064</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>73 kt</td>
</tr>
<tr>
<td>13:30:00.04</td>
<td>37.087</td>
<td>-116.034</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>20:00:00.04</td>
<td>37.178</td>
<td>-116.099</td>
<td>1380</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>22 kt</td>
</tr>
<tr>
<td>15:30:00.09</td>
<td>37.227</td>
<td>-116.056</td>
<td>1525</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>62 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.068</td>
<td>-116.036</td>
<td>1213</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.059</td>
<td>-116.040</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.010</td>
<td>-116.204</td>
<td>1954</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:02:47.13</td>
<td>37.171</td>
<td>-116.050</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>17:13:00.07</td>
<td>37.155</td>
<td>-116.073</td>
<td>1300</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>25 kt</td>
</tr>
<tr>
<td>22:15:00.07</td>
<td>37.316</td>
<td>-116.300</td>
<td>2043</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>365 kt</td>
</tr>
<tr>
<td>15:33:30.13</td>
<td>37.140</td>
<td>-116.134</td>
<td>1411</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>1.2 kt</td>
</tr>
<tr>
<td>13:16:00.07</td>
<td>37.169</td>
<td>-116.049</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:36:00.05</td>
<td>37.046</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.05</td>
<td>36.877</td>
<td>-115.951</td>
<td>1013</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7.8 kt</td>
</tr>
<tr>
<td>18:00:00.04</td>
<td>37.103</td>
<td>-116.037</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:45:30.09</td>
<td>37.169</td>
<td>-116.047</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:00:00.05</td>
<td>37.047</td>
<td>-116.018</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:45:00.00</td>
<td>37.170</td>
<td>-116.048</td>
<td>1279</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>2.3 kt</td>
</tr>
<tr>
<td>12:00:00.14</td>
<td>37.134</td>
<td>-116.051</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerise</td>
<td>11/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigil</td>
<td>11/22/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterling</td>
<td>12/03/1966</td>
<td>LLNL/DoD</td>
<td>Hattiesburg, Mississippi</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Point</td>
<td>12/13/1966</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidecar</td>
<td>12/13/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greeley</td>
<td>12/20/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rivet I</td>
<td>01/18/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nash</td>
<td>01/19/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bourbon</td>
<td>01/20/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rivet II</td>
<td>01/26/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward</td>
<td>02/08/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persimmon</td>
<td>02/23/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agile</td>
<td>02/23/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rivet III</td>
<td>03/02/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mushroom</td>
<td>03/03/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ef</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fizz</td>
<td>03/10/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakland</td>
<td>04/04/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heilman</td>
<td>04/06/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fawn</td>
<td>04/07/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolate</td>
<td>04/21/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3es</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effendi</td>
<td>04/27/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mickey</td>
<td>05/10/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodore</td>
<td>05/20/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2am</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scotch</td>
<td>05/23/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U19as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knickerbocker</td>
<td>05/26/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absinthe</td>
<td>05/26/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch</td>
<td>06/22/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>--------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>15:02:00.04</td>
<td>37.043</td>
<td>-116.011</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.13</td>
<td>37.169</td>
<td>-116.049</td>
<td>1278</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>12:15:00.05</td>
<td>31.142</td>
<td>-89.570</td>
<td>46</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>380 tons</td>
</tr>
<tr>
<td>21:00:00.08</td>
<td>36.877</td>
<td>-115.939</td>
<td>1003</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:50:00.08</td>
<td>37.035</td>
<td>-116.008</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.08</td>
<td>37.302</td>
<td>-116.409</td>
<td>1945</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>870 kt</td>
</tr>
<tr>
<td>14:55:00.00</td>
<td>37.165</td>
<td>-116.047</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:45:00.14</td>
<td>37.144</td>
<td>-116.136</td>
<td>1425</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>39 kt</td>
</tr>
<tr>
<td>17:40:03.41</td>
<td>37.100</td>
<td>-116.005</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>16:30:00.00</td>
<td>37.165</td>
<td>-116.049</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:15:00.13</td>
<td>37.167</td>
<td>-116.048</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:34:00.04</td>
<td>37.017</td>
<td>-116.017</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:50:00.13</td>
<td>37.127</td>
<td>-116.067</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:00:00.00</td>
<td>37.166</td>
<td>-116.050</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:19:00.04</td>
<td>37.039</td>
<td>-116.011</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.046</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:20:00.15</td>
<td>37.162</td>
<td>-116.083</td>
<td>1321</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.12</td>
<td>37.137</td>
<td>-116.134</td>
<td>1405</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.054</td>
<td>-116.023</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:09:00.04</td>
<td>37.019</td>
<td>-116.038</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:45:00.00</td>
<td>37.139</td>
<td>-116.064</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:40:00.04</td>
<td>37.078</td>
<td>-115.996</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:00:00.20</td>
<td>37.130</td>
<td>-116.065</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>250 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.275</td>
<td>-116.371</td>
<td>2034</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>155 kt</td>
</tr>
<tr>
<td>15:00:15.00</td>
<td>37.248</td>
<td>-116.481</td>
<td>1878</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>76 kt</td>
</tr>
<tr>
<td>12:30:00.03</td>
<td>37.045</td>
<td>-116.020</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:10:00.00</td>
<td>37.126</td>
<td>-116.030</td>
<td>1277</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3.1 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>-----------</td>
<td>----------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Latchkey -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>505 Midi Mist</td>
<td>06/26/1967</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Controlled release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>506 Umber</td>
<td>06/29/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3em</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Crosstie</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>507 Vito</td>
<td>07/14/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>508 Stanley</td>
<td>07/27/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>509 Gibson</td>
<td>08/04/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>510 Washer</td>
<td>08/10/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>511 Bordeaux</td>
<td>08/18/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>512 Lexington</td>
<td>08/24/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>513 Door Mist</td>
<td>08/31/1967</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12g.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>514 Yard</td>
<td>09/07/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10af</td>
<td></td>
<td></td>
</tr>
<tr>
<td>515 Gilroy</td>
<td>09/15/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>516 Marvel</td>
<td>09/21/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ds1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emplacement technique experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>517 Zaza</td>
<td>09/27/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U4c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>518 Lanpher</td>
<td>10/18/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>519 Sazerac</td>
<td>10/25/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>520 Cognac</td>
<td>10/25/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>521 Worth</td>
<td>10/25/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>522 Cobbler</td>
<td>11/08/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7u</td>
<td></td>
<td></td>
</tr>
<tr>
<td>523 Polka</td>
<td>12/06/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>524 Gasbuggy</td>
<td>12/10/1967</td>
<td>LLNL</td>
<td>Farmington, New Mexico</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint Government/industry gas stimulation experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>525 Stilt</td>
<td>12/15/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>526 Hupmobile</td>
<td>01/18/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>527 Staccato</td>
<td>01/19/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>528 Faultless</td>
<td>01/19/1968</td>
<td>LLNL</td>
<td>Central Nevada</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seismic calibration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>529 Brush</td>
<td>01/24/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eq</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>16:00:00.08</td>
<td>37.202</td>
<td>-116.209</td>
<td>2200</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt 505</td>
</tr>
<tr>
<td>11:25:00.04</td>
<td>37.029</td>
<td>-116.023</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>10 kt 506</td>
</tr>
</tbody>
</table>

### Operation Crosstie

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30:00.08</td>
<td>37.165</td>
<td>-116.046</td>
<td>1278</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt 507</td>
</tr>
<tr>
<td>13:00:00.12</td>
<td>37.149</td>
<td>-116.049</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 508</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.024</td>
<td>-116.013</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 509</td>
</tr>
<tr>
<td>14:10:00.00</td>
<td>37.157</td>
<td>-116.048</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 510</td>
</tr>
<tr>
<td>20:12:30.04</td>
<td>37.012</td>
<td>-116.037</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 511</td>
</tr>
<tr>
<td>13:30:00.00</td>
<td>37.163</td>
<td>-116.075</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 512</td>
</tr>
<tr>
<td>16:30:00.04</td>
<td>37.178</td>
<td>-116.210</td>
<td>2295</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt 513</td>
</tr>
<tr>
<td>13:45:00.00</td>
<td>37.153</td>
<td>-116.054</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 514</td>
</tr>
<tr>
<td>17:30:00.04</td>
<td>37.035</td>
<td>-116.022</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 515</td>
</tr>
<tr>
<td>20:45:00.00</td>
<td>37.166</td>
<td>-116.039</td>
<td>1288</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>2.2 kt 516</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.099</td>
<td>-116.054</td>
<td>1240</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 517</td>
</tr>
<tr>
<td>14:30:00.08</td>
<td>37.116</td>
<td>-116.059</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 518</td>
</tr>
<tr>
<td>14:30:00.06</td>
<td>37.032</td>
<td>-116.027</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 519</td>
</tr>
<tr>
<td>14:30:00.14</td>
<td>37.050</td>
<td>-116.040</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 520</td>
</tr>
<tr>
<td>14:45:00.08</td>
<td>37.156</td>
<td>-116.049</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 521</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.092</td>
<td>-116.037</td>
<td>1242</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 522</td>
</tr>
<tr>
<td>13:00:00.00</td>
<td>37.159</td>
<td>-116.054</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 523</td>
</tr>
<tr>
<td>19:30:00.14</td>
<td>36.678</td>
<td>-107.209</td>
<td>2179</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>29 kt 524</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.037</td>
<td>-116.003</td>
<td>1204</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 525</td>
</tr>
<tr>
<td>16:30:00.13</td>
<td>37.146</td>
<td>-116.067</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7.4 kt 526</td>
</tr>
<tr>
<td>15:00:00.00</td>
<td>37.156</td>
<td>-116.055</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt 527</td>
</tr>
<tr>
<td>18:15:00.08</td>
<td>38.634</td>
<td>-118.133</td>
<td>1834</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt 528</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.043</td>
<td>-116.015</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt 529</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabriole</td>
<td>01/26/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mallet</td>
<td>01/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knox</td>
<td>02/21/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2at</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torch</td>
<td>02/21/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dorsal Fin</td>
<td>02/29/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12e.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russet</td>
<td>03/05/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U6a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buggy-A</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buggy-B</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buggy-C</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buggy-D</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buggy-E</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row charge experiment -- five simultaneous detonations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pommard</td>
<td>03/14/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stinger</td>
<td>03/22/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U19l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk Shake</td>
<td>03/25/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U5k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noor</td>
<td>04/10/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2be</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throw</td>
<td>04/10/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shuffle</td>
<td>04/18/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scroll</td>
<td>04/23/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U19n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear test detection experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boxcar</td>
<td>04/26/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hatchet</td>
<td>05/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crock</td>
<td>05/08/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarksmobile</td>
<td>05/17/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adze</td>
<td>05/28/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wembley</td>
<td>06/05/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>16:00:00.11</td>
<td>37.281</td>
<td>-116.515</td>
<td>1862</td>
<td>Crater</td>
<td>Plowshare</td>
<td>2.3 kt</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.001</td>
<td>-116.010</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.00</td>
<td>37.117</td>
<td>-116.055</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.042</td>
<td>-116.003</td>
<td>1210</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:08:30.04</td>
<td>37.185</td>
<td>-116.212</td>
<td>2260</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>36.970</td>
<td>-116.057</td>
<td>1170</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:04:00.11</td>
<td>37.007</td>
<td>-116.371</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>17:04:00.11</td>
<td>37.008</td>
<td>-116.371</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>17:04:00.11</td>
<td>37.008</td>
<td>-116.372</td>
<td>1561</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>17:04:00.11</td>
<td>37.008</td>
<td>-116.372</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>17:04:00.11</td>
<td>37.008</td>
<td>-116.373</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>15:19:00.06</td>
<td>37.048</td>
<td>-116.012</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.5 kt</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.333</td>
<td>-116.312</td>
<td>2035</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>18:44:27.04</td>
<td>36.872</td>
<td>-115.932</td>
<td>993</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:02:00.04</td>
<td>37.052</td>
<td>-116.022</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.00</td>
<td>37.154</td>
<td>-116.080</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:00:00.00</td>
<td>37.157</td>
<td>-116.083</td>
<td>1316</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:05:00.00</td>
<td>37.152</td>
<td>-116.038</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>17:01:30.08</td>
<td>37.338</td>
<td>-116.376</td>
<td>2032</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.295</td>
<td>-116.457</td>
<td>1914</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.3 Mt</td>
</tr>
<tr>
<td>16:00:00.04</td>
<td>37.029</td>
<td>-116.021</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:10:00.00</td>
<td>37.157</td>
<td>-116.036</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:00:00.00</td>
<td>37.120</td>
<td>-116.060</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:45:00.04</td>
<td>37.009</td>
<td>-115.996</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:21:30.04</td>
<td>37.035</td>
<td>-116.017</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tub-A</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tub-B</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tub-C</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tub-D</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10adj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tub-F</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aja</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rickey</td>
<td>06/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U19c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funnel</td>
<td>06/25/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sevilla</td>
<td>06/25/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chateaugay</td>
<td>06/28/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spud</td>
<td>07/17/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanya</td>
<td>07/30/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp</td>
<td>08/09/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rack</td>
<td>08/15/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diana Moon</td>
<td>08/27/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sled</td>
<td>08/29/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U19i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noggin</td>
<td>09/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knife A</td>
<td>09/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoddard</td>
<td>09/17/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hudson Seal</td>
<td>09/24/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knife C</td>
<td>10/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3er</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welder</td>
<td>10/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vat</td>
<td>10/10/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hula</td>
<td>10/29/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bit-A</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bit-B</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crew</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crew-2nd</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crew-3rd</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>21:30:00.00</td>
<td>37.167</td>
<td>-116.043</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:30:00.00</td>
<td>37.165</td>
<td>-116.044</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:30:00.00</td>
<td>37.165</td>
<td>-116.042</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:30:00.00</td>
<td>37.167</td>
<td>-116.046</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:30:00.00</td>
<td>37.167</td>
<td>-116.043</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:59:59.97</td>
<td>37.265</td>
<td>-116.316</td>
<td>2116</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.046</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.042</td>
<td>-115.993</td>
<td>1226</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>12:22:00.08</td>
<td>37.245</td>
<td>-116.484</td>
<td>1876</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
</tbody>
</table>

**Operation Crosstie -- Continued**

**Operation Bowline**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00:00.04</td>
<td>37.001</td>
<td>-116.000</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:00:00.00</td>
<td>37.117</td>
<td>-116.083</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:00:00.00</td>
<td>37.162</td>
<td>-116.078</td>
<td>1314</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.00</td>
<td>37.124</td>
<td>-116.049</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.04</td>
<td>36.877</td>
<td>-115.932</td>
<td>1004</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:45:00.04</td>
<td>37.250</td>
<td>-116.348</td>
<td>2057</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:00:00.13</td>
<td>37.136</td>
<td>-116.048</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.032</td>
<td>-116.012</td>
<td>1190</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.120</td>
<td>-116.128</td>
<td>1370</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>31 kt</td>
</tr>
<tr>
<td>17:05:01.09</td>
<td>37.205</td>
<td>-116.207</td>
<td>2168</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:29:00.04</td>
<td>37.026</td>
<td>-115.994</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.046</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.00</td>
<td>37.133</td>
<td>-116.043</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:36:00.09</td>
<td>37.113</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:30:00.04</td>
<td>37.047</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:30:00.04</td>
<td>37.047</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:30:00.04</td>
<td>37.017</td>
<td>-116.037</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:15:00.09</td>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>15:16:00.09</td>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:16:00.09</td>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

51
## United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knife B</td>
<td>11/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dz</td>
</tr>
<tr>
<td>Auger</td>
<td>11/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fx</td>
</tr>
<tr>
<td>Ming Vase</td>
<td>11/20/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.04</td>
</tr>
<tr>
<td>Tinderbox</td>
<td>11/22/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9az</td>
</tr>
<tr>
<td>Schooner</td>
<td>12/08/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20u</td>
</tr>
<tr>
<td>Tyg-A</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc1e</td>
</tr>
<tr>
<td>Tyg-B</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc2d</td>
</tr>
<tr>
<td>Tyg-C</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc3c</td>
</tr>
<tr>
<td>Tyg-D</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc4a</td>
</tr>
<tr>
<td>Tyg-E</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc5b</td>
</tr>
<tr>
<td>Tyg-F</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc6f</td>
</tr>
<tr>
<td>Bay Leaf</td>
<td>12/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gq</td>
</tr>
<tr>
<td>Scissors</td>
<td>12/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gh</td>
</tr>
<tr>
<td>Benham</td>
<td>12/19/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20c</td>
</tr>
<tr>
<td>Packard</td>
<td>01/15/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2u</td>
</tr>
<tr>
<td>Wineskin</td>
<td>01/15/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12r</td>
</tr>
<tr>
<td>Shave</td>
<td>01/22/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gk</td>
</tr>
<tr>
<td>Vise</td>
<td>01/30/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ej</td>
</tr>
<tr>
<td>Biggin</td>
<td>01/30/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bz</td>
</tr>
<tr>
<td>Nipper</td>
<td>02/04/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gl</td>
</tr>
<tr>
<td>Winch</td>
<td>02/04/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gf</td>
</tr>
<tr>
<td>Cypress</td>
<td>02/12/1969</td>
<td>LLNL/SNL/DoD</td>
<td>NTS</td>
<td>U12g.09</td>
</tr>
<tr>
<td>Valise</td>
<td>03/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9by</td>
</tr>
<tr>
<td>Chatty</td>
<td>03/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bn</td>
</tr>
<tr>
<td>Barsac</td>
<td>03/20/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gc</td>
</tr>
<tr>
<td>Coffer</td>
<td>03/21/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2de</td>
</tr>
<tr>
<td>Gourd-Amber</td>
<td>04/24/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bf</td>
</tr>
<tr>
<td>Gourd-Brown</td>
<td>04/24/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bl</td>
</tr>
<tr>
<td>Thistle</td>
<td>04/30/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U7t</td>
</tr>
<tr>
<td>Blenton</td>
<td>04/30/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U7p</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>15:45:00.04</td>
<td>37.026</td>
<td>-116.034</td>
<td>1188</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.048</td>
<td>-116.001</td>
<td>1222</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.03</td>
<td>37.010</td>
<td>-116.207</td>
<td>1931</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:19:00.04</td>
<td>37.140</td>
<td>-116.043</td>
<td>1261</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.14</td>
<td>37.343</td>
<td>-116.567</td>
<td>1668</td>
<td>Crater</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.121</td>
<td>-116.081</td>
<td>1273</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.118</td>
<td>-116.080</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.118</td>
<td>-116.078</td>
<td>1268</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.121</td>
<td>-116.079</td>
<td>1272</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.120</td>
<td>-116.077</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.08</td>
<td>37.119</td>
<td>-116.083</td>
<td>1273</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.047</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:20:00.04</td>
<td>37.004</td>
<td>-116.040</td>
<td>1181</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.04</td>
<td>37.231</td>
<td>-116.474</td>
<td>1887</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.07</td>
<td>37.148</td>
<td>-116.067</td>
<td>1288</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:30:00.04</td>
<td>37.209</td>
<td>-116.226</td>
<td>2263</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.015</td>
<td>-115.995</td>
<td>1191</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.053</td>
<td>-116.030</td>
<td>1204</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:17:00.12</td>
<td>37.133</td>
<td>-116.041</td>
<td>1257</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.003</td>
<td>-116.010</td>
<td>1178</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.009</td>
<td>-116.043</td>
<td>1185</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.12</td>
<td>37.139</td>
<td>-116.042</td>
<td>1261</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.43</td>
<td>37.162</td>
<td>-116.077</td>
<td>1312</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:12:00.04</td>
<td>37.022</td>
<td>-116.031</td>
<td>1187</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.41</td>
<td>37.133</td>
<td>-116.088</td>
<td>1291</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:04:00.14</td>
<td>37.164</td>
<td>-116.081</td>
<td>1320</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:04:00.14</td>
<td>37.160</td>
<td>-116.082</td>
<td>1317</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.090</td>
<td>-116.007</td>
<td>1281</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.081</td>
<td>-116.015</td>
<td>1255</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Bowline -- Continued**
## United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Bowline -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>597 Purse</td>
<td>05/07/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20v</td>
</tr>
<tr>
<td>598 Aliment</td>
<td>05/15/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gj</td>
</tr>
<tr>
<td>599 Torrido</td>
<td>05/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U7w</td>
</tr>
<tr>
<td>600 Ipecac-A</td>
<td>05/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hka</td>
</tr>
<tr>
<td>Ipecac-B</td>
<td>05/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkb</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite (trace)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>601 Tapper</td>
<td>06/12/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3go</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>602 Bowl-1</td>
<td>06/26/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bo1</td>
</tr>
<tr>
<td>Bowl-2</td>
<td>06/26/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bo2</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Mandrel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603 Ildrim</td>
<td>07/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2au</td>
</tr>
<tr>
<td>604 Hutch</td>
<td>07/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2df</td>
</tr>
<tr>
<td>605 Spider-A</td>
<td>08/14/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bp1</td>
</tr>
<tr>
<td>Spider-B</td>
<td>08/14/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bp2</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>606 Pliers</td>
<td>08/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gn</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>607 Horehound</td>
<td>08/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gm</td>
</tr>
<tr>
<td><strong>Rulison</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>608 Minch</td>
<td>09/10/1969</td>
<td>LANL</td>
<td>Grand Valley, Colorado</td>
<td>- - -</td>
</tr>
<tr>
<td>Joint Government/industry gas stimulation experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational release of radioactivity detected offsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>609 Minute Steak</td>
<td>09/12/1969</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11f</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610 Jorum</td>
<td>09/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20e</td>
</tr>
<tr>
<td>Kyack-A</td>
<td>09/20/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bq1</td>
</tr>
<tr>
<td>Kyack-B</td>
<td>09/20/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bq2</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>612 Seaweed-C</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hke</td>
</tr>
<tr>
<td>Seaweed-D</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkf</td>
</tr>
<tr>
<td>Seaweed-E</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkc</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:00:04</td>
<td>37.015</td>
<td>-116.003</td>
<td>1181</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:04</td>
<td>37.015</td>
<td>-116.001</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:04</td>
<td>37.009</td>
<td>-116.031</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.13</td>
<td>37.162</td>
<td>-116.079</td>
<td>1316</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.13</td>
<td>37.161</td>
<td>-116.080</td>
<td>1315</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:45:00.04</td>
<td>37.021</td>
<td>-116.039</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:45:00.04</td>
<td>36.993</td>
<td>-115.996</td>
<td>1174</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:00:00.01</td>
<td>39.356</td>
<td>-107.949</td>
<td>2469</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>40 kt</td>
</tr>
<tr>
<td>18:02:20.42</td>
<td>36.877</td>
<td>-115.929</td>
<td>1007</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.314</td>
<td>-116.462</td>
<td>1898</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 1 Mt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.159</td>
<td>-116.069</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.157</td>
<td>-116.067</td>
<td>1293</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.011</td>
<td>-115.999</td>
<td>1184</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.010</td>
<td>-116.000</td>
<td>1183</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.014</td>
<td>-115.999</td>
<td>1184</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

#### Operation Bowline -- Continued

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
</tbody>
</table>

#### Operation Mandrel

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:02:30.04</td>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:55:00.04</td>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
</tbody>
</table>

---

55
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milrow</td>
<td>Seismic calibration</td>
<td>10/02/1969</td>
<td>LANL</td>
<td>Amchitka, Alaska</td>
</tr>
<tr>
<td>Pipkin</td>
<td></td>
<td>10/08/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Seaweed B</td>
<td>Accidental release of radioactivity detected onsite only</td>
<td>10/16/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Cruet</td>
<td></td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Pod-A</td>
<td></td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Pod-B</td>
<td></td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Pod-C</td>
<td></td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Pod-D</td>
<td>Simultaneous, separate holes Accidental release of radioactivity detected offsite only</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Calabash</td>
<td></td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Scuttle</td>
<td>Accidental release of radioactivity detected offsite by aircraft only</td>
<td>11/13/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Piccalilli</td>
<td></td>
<td>11/21/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Planer</td>
<td></td>
<td>11/21/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Diesel Train</td>
<td></td>
<td>12/05/1969</td>
<td>LANL/DoD</td>
<td>NTS</td>
</tr>
<tr>
<td>Culantro-A</td>
<td></td>
<td>12/10/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Culantro-B</td>
<td>Simultaneous, separate holes</td>
<td>12/10/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Tun-A</td>
<td>Simultaneous, separate holes Accidental release of radioactivity detected onsite only</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Tun-B</td>
<td></td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Tun-C</td>
<td></td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Tun-D</td>
<td>Simultaneous, separate holes Accidental release of radioactivity detected onsite only</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Grape A</td>
<td></td>
<td>12/17/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Lovage</td>
<td></td>
<td>12/17/1969</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>Terrine-White</td>
<td></td>
<td>12/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Terrine-Yellow</td>
<td>Simultaneous, separate holes</td>
<td>12/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Fob-Green</td>
<td>Simultaneous, separate holes</td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Fob-Red</td>
<td></td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Fob-Blue</td>
<td>Simultaneous, separate holes</td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>22:06:00.04</td>
<td>51.403</td>
<td>179.179</td>
<td>40</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.14</td>
<td>37.257</td>
<td>-116.442</td>
<td>1965</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.013</td>
<td>-115.999</td>
<td>1185</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:30:00.04</td>
<td>37.121</td>
<td>-116.129</td>
<td>1372</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.04</td>
<td>37.140</td>
<td>-116.131</td>
<td>1397</td>
<td>Shaft</td>
</tr>
<tr>
<td>22:01:51.04</td>
<td>37.143</td>
<td>-116.065</td>
<td>1283</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:15:00.13</td>
<td>37.165</td>
<td>-116.076</td>
<td>1312</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:52:00.04</td>
<td>37.031</td>
<td>-116.003</td>
<td>1195</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:52:00.08</td>
<td>37.015</td>
<td>-116.024</td>
<td>1183</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.180</td>
<td>-116.212</td>
<td>2207</td>
<td>Tunnel</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.015</td>
<td>-116.004</td>
<td>1181</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.015</td>
<td>-116.002</td>
<td>1182</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.168</td>
<td>-116.080</td>
<td>1323</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.169</td>
<td>-116.080</td>
<td>1324</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.168</td>
<td>-116.078</td>
<td>1319</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.169</td>
<td>-116.078</td>
<td>1320</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.083</td>
<td>-116.002</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:15:00.04</td>
<td>37.007</td>
<td>-116.024</td>
<td>1181</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.04</td>
<td>37.120</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.04</td>
<td>37.121</td>
<td>-116.029</td>
<td>1277</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.21</td>
<td>37.141</td>
<td>-116.038</td>
<td>1266</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.21</td>
<td>37.137</td>
<td>-116.038</td>
<td>1263</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.21</td>
<td>37.141</td>
<td>-116.034</td>
<td>1273</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>---------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>Operation Mandrel -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>629 Ajo</td>
<td>01/30/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gd</td>
</tr>
<tr>
<td>In mined shaft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>630 Grape B</td>
<td>02/04/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7v</td>
</tr>
<tr>
<td>631 Belen</td>
<td>02/04/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3br</td>
</tr>
<tr>
<td>632 Labis</td>
<td>02/05/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10an</td>
</tr>
<tr>
<td>633 Diana Mist</td>
<td>02/11/1970</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.06</td>
</tr>
<tr>
<td>634 Cumarin</td>
<td>02/25/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gz</td>
</tr>
<tr>
<td>635 Yannigan-Red</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay1</td>
</tr>
<tr>
<td>Yannigan-Blue</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay3</td>
</tr>
<tr>
<td>Yannigan-White</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay2</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>636 Cythus</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8b</td>
</tr>
<tr>
<td>637 Arabis-Red</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsv26</td>
</tr>
<tr>
<td>Arabis-Green</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx28</td>
</tr>
<tr>
<td>Arabis-Blue</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz26</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>638 Jal</td>
<td>03/19/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hh</td>
</tr>
<tr>
<td>639 Shaper</td>
<td>03/23/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7r</td>
</tr>
<tr>
<td>640 Handley</td>
<td>03/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20m</td>
</tr>
<tr>
<td>641 Snubber</td>
<td>04/21/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ev2s</td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>642 Can-Green</td>
<td>04/21/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd1</td>
</tr>
<tr>
<td>Can-Red</td>
<td>04/21/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd4</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>643 Beebalm</td>
<td>05/01/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fn</td>
</tr>
<tr>
<td>644 Hod-A (Green)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx23</td>
</tr>
<tr>
<td>Hod-B (Red)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx20</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>645 Hod-C (Blue)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9iz25</td>
</tr>
<tr>
<td>646 Mint Leaf</td>
<td>05/05/1970</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.01</td>
</tr>
<tr>
<td>Controlled release of radioactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>detected onsite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>647 Diamond Dust</td>
<td>05/12/1970</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.05</td>
</tr>
<tr>
<td>Nuclear test detection experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>648 Cornice-Yellow</td>
<td>05/15/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ap1</td>
</tr>
<tr>
<td>Cornice-Green</td>
<td>05/15/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ap3</td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.031</td>
<td>-116.036</td>
<td>1191</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.098</td>
<td>-116.027</td>
<td>1269</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.07</td>
<td>37.055</td>
<td>-116.040</td>
<td>1206</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.164</td>
<td>-116.040</td>
<td>1286</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:15:00.04</td>
<td>37.201</td>
<td>-116.206</td>
<td>2229</td>
<td>Tunnel</td>
</tr>
<tr>
<td>14:28:38.04</td>
<td>37.037</td>
<td>-115.999</td>
<td>1206</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.116</td>
<td>-116.062</td>
<td>1258</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.114</td>
<td>-116.067</td>
<td>1258</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.118</td>
<td>-116.067</td>
<td>1261</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:24:00.94</td>
<td>37.173</td>
<td>-116.093</td>
<td>1353</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.21</td>
<td>37.140</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.21</td>
<td>37.142</td>
<td>-116.035</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.21</td>
<td>37.140</td>
<td>-116.038</td>
<td>1265</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:03:30.04</td>
<td>37.001</td>
<td>-116.024</td>
<td>1178</td>
<td>Shaft</td>
</tr>
<tr>
<td>23:05:00.04</td>
<td>37.086</td>
<td>-116.022</td>
<td>1252</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.20</td>
<td>37.300</td>
<td>-116.535</td>
<td>1772</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.055</td>
<td>-115.989</td>
<td>1253</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.112</td>
<td>-116.083</td>
<td>1266</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.116</td>
<td>-116.081</td>
<td>1268</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:13:00.04</td>
<td>37.059</td>
<td>-116.029</td>
<td>1209</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.17</td>
<td>37.136</td>
<td>-116.035</td>
<td>1268</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.17</td>
<td>37.133</td>
<td>-116.035</td>
<td>1266</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:25:00.00</td>
<td>37.138</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.17</td>
<td>37.216</td>
<td>-116.185</td>
<td>2094</td>
<td>Tunnel</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.010</td>
<td>-116.203</td>
<td>1899</td>
<td>Tunnel</td>
</tr>
<tr>
<td>13:30:00.17</td>
<td>37.166</td>
<td>-116.036</td>
<td>1293</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.17</td>
<td>37.162</td>
<td>-116.040</td>
<td>1286</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>649 Manzanas</td>
<td>05/21/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gr</td>
</tr>
<tr>
<td>Operation Mandrel -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>650 Morrones</td>
<td>05/21/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ei</td>
</tr>
<tr>
<td>651 Hudson Moon</td>
<td>05/26/1970</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.12</td>
</tr>
<tr>
<td>652 Flask-Green</td>
<td>05/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2az1</td>
</tr>
<tr>
<td>Flask-Yellow</td>
<td>05/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2az2</td>
</tr>
<tr>
<td>Flask-Red</td>
<td>05/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2az3</td>
</tr>
<tr>
<td>653 Piton-C</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsaa25</td>
</tr>
<tr>
<td>654 Piton-A</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsy30</td>
</tr>
<tr>
<td>Piton-B</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx27</td>
</tr>
<tr>
<td>655 Arnica-Yellow</td>
<td>06/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd2</td>
</tr>
<tr>
<td>Arnica-Violet</td>
<td>06/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd3</td>
</tr>
<tr>
<td>Operation Emery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>656 Scree-Acajou</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx24</td>
</tr>
<tr>
<td>Scree-Alhambra</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz21</td>
</tr>
<tr>
<td>Scree-Chamois</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz24</td>
</tr>
<tr>
<td>657 Tijeras</td>
<td>10/14/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7y</td>
</tr>
<tr>
<td>658 Truchas-Chacon</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hn</td>
</tr>
<tr>
<td>Truchas-Chamisal</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ho</td>
</tr>
<tr>
<td>Truchas-Rodarte</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hm</td>
</tr>
<tr>
<td>659 Abeytas</td>
<td>11/05/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gx</td>
</tr>
<tr>
<td>660 Penasco</td>
<td>11/19/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hl</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.012</td>
<td>-115.993</td>
<td>1194</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:15:00.03</td>
<td>37.071</td>
<td>-116.014</td>
<td>1237</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:16:00.17</td>
<td>37.183</td>
<td>-116.214</td>
<td>2274</td>
<td>Tunnel</td>
</tr>
<tr>
<td>15:00:00.05</td>
<td>37.113</td>
<td>-116.063</td>
<td>1251</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.05</td>
<td>37.118</td>
<td>-116.064</td>
<td>1259</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.05</td>
<td>37.116</td>
<td>-116.068</td>
<td>1259</td>
<td>Shaft</td>
</tr>
<tr>
<td>11:45:00.20</td>
<td>37.138</td>
<td>-116.031</td>
<td>1279</td>
<td>Shaft</td>
</tr>
<tr>
<td>12:00:00.16</td>
<td>37.144</td>
<td>-116.033</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>12:00:00.16</td>
<td>37.141</td>
<td>-116.035</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.04</td>
<td>37.114</td>
<td>-116.087</td>
<td>1270</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.04</td>
<td>37.117</td>
<td>-116.085</td>
<td>1272</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:05:00.02</td>
<td>37.137</td>
<td>-116.035</td>
<td>1269</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:05:00.02</td>
<td>37.134</td>
<td>-116.032</td>
<td>1273</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:05:00.02</td>
<td>37.137</td>
<td>-116.032</td>
<td>1275</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.071</td>
<td>-116.006</td>
<td>1249</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.03</td>
<td>37.014</td>
<td>-116.019</td>
<td>1182</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.014</td>
<td>-116.018</td>
<td>1182</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.04</td>
<td>37.015</td>
<td>-116.020</td>
<td>1183</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.029</td>
<td>-116.013</td>
<td>1188</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.04</td>
<td>37.015</td>
<td>-116.017</td>
<td>1183</td>
<td>Shaft</td>
</tr>
</tbody>
</table>
## United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(mm/dd/yyyy)</td>
<td>(GMT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Emery -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>661 Carrizozo</td>
<td>12/03/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hr</td>
</tr>
<tr>
<td>662 Artesia</td>
<td>12/16/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7x</td>
</tr>
<tr>
<td>663 Avens-Andorre</td>
<td>12/16/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9its28</td>
</tr>
<tr>
<td>664 Canjilon</td>
<td>12/16/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fq</td>
</tr>
<tr>
<td>665 Carpetbag</td>
<td>12/17/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dg</td>
</tr>
<tr>
<td>666 Baneberry</td>
<td>12/18/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8d</td>
</tr>
<tr>
<td>667 Embudo</td>
<td>06/16/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hd</td>
</tr>
<tr>
<td>668 Laguna</td>
<td>06/23/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3d</td>
</tr>
<tr>
<td>669 Dexter</td>
<td>06/23/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hs</td>
</tr>
<tr>
<td>670 Harebell</td>
<td>06/24/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2br</td>
</tr>
<tr>
<td>671 Camphor</td>
<td>06/29/1971</td>
<td>LLNL/SNL/DoD</td>
<td>NTS</td>
<td>U12g.10</td>
</tr>
<tr>
<td><strong>Operation Grommet</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>672 Diamond Mine</td>
<td>07/01/1971</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.06</td>
</tr>
<tr>
<td>673 Miniata</td>
<td>07/08/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bu</td>
</tr>
<tr>
<td>674 Bracken</td>
<td>07/09/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aq</td>
</tr>
<tr>
<td>675 Apodaca</td>
<td>07/21/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gs</td>
</tr>
<tr>
<td>676 Barranca</td>
<td>08/04/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3he</td>
</tr>
<tr>
<td>677 Nama-Amarylis</td>
<td>08/05/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx31</td>
</tr>
<tr>
<td>678 Baltic</td>
<td>08/06/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsss25</td>
</tr>
<tr>
<td>679 Algodones</td>
<td>08/18/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jn</td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:07:00.00</td>
<td>37.006</td>
<td>-116.041</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:07:00.04</td>
<td>37.002</td>
<td>-116.039</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.100</td>
<td>-116.009</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>16:00:00.17</td>
<td>37.142</td>
<td>-116.040</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.17</td>
<td>37.137</td>
<td>-116.039</td>
<td>1262</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.17</td>
<td>37.134</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.17</td>
<td>37.143</td>
<td>-116.035</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.05</td>
<td>37.072</td>
<td>-116.026</td>
<td>1227</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:05:00.16</td>
<td>37.129</td>
<td>-116.084</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>220 kt</td>
</tr>
<tr>
<td>15:30:00.20</td>
<td>37.173</td>
<td>-116.100</td>
<td>1367</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10 kt</td>
</tr>
<tr>
<td>14:50:00.04</td>
<td>37.033</td>
<td>-116.015</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.04</td>
<td>37.022</td>
<td>-116.024</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.013</td>
<td>-116.017</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.147</td>
<td>-116.068</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>18:30:00.16</td>
<td>37.177</td>
<td>-116.212</td>
<td>2289</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

### Operation Grommet

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00:00.04</td>
<td>37.011</td>
<td>-116.204</td>
<td>1896</td>
<td>Tunnel</td>
<td>Vela Uniform</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.110</td>
<td>-116.052</td>
<td>1247</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>83 kt</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.164</td>
<td>-116.034</td>
<td>1297</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:33:00.05</td>
<td>37.014</td>
<td>-115.993</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:30:00.04</td>
<td>37.026</td>
<td>-116.020</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:07:45.20</td>
<td>37.145</td>
<td>-116.034</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:07:45.20</td>
<td>37.141</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:31:00.16</td>
<td>37.138</td>
<td>-116.042</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.03</td>
<td>37.057</td>
<td>-116.037</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Grommet -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frijoles-Deming</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frijoles-Espuela</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ju</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frijoles-Guaje</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frijoles-Petaca Simultaneous, separate holes</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedernal</td>
<td>09/29/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chantilly</td>
<td>09/29/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2di</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cathay</td>
<td>10/08/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagoon</td>
<td>10/14/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannikin</td>
<td>11/06/1971</td>
<td>LLNL</td>
<td>Amchitka, Alaska</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagonal Line Accidental release of radioactivity detected offsite by aircraft only</td>
<td>11/24/1971</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parnassia</td>
<td>11/30/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaenactis</td>
<td>12/14/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospah</td>
<td>12/14/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3je</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yerba</td>
<td>12/14/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U1c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mescalero</td>
<td>01/05/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cowles</td>
<td>02/03/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dianthus</td>
<td>02/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10at</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sapho</td>
<td>03/23/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dh2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocate Simultaneous, separate holes</td>
<td>03/30/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onaja Simultaneous, separate holes</td>
<td>03/30/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3js</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longchamps</td>
<td>04/19/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jicarilla</td>
<td>04/19/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misty North</td>
<td>05/02/1972</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kara</td>
<td>05/11/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dh3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinnia</td>
<td>05/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monero</td>
<td>05/19/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merida</td>
<td>06/07/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capitan</td>
<td>06/28/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haplopappus</td>
<td>06/28/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ltsw22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tajique</td>
<td>06/28/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U7aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Toggle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diamond Sculls</td>
<td>07/20/1972</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atarque</td>
<td>07/25/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ht</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>--------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.022</td>
<td>-116.020</td>
<td>1186</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.023</td>
<td>-116.017</td>
<td>1186</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.024</td>
<td>-116.016</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.022</td>
<td>-116.017</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.04</td>
<td>37.011</td>
<td>-116.008</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.14</td>
<td>37.124</td>
<td>-116.088</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.15</td>
<td>37.114</td>
<td>-116.038</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.16</td>
<td>37.180</td>
<td>-116.054</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:00:00.06</td>
<td>51.456</td>
<td>179.102</td>
<td>63</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 5 Mt</td>
</tr>
<tr>
<td>20:15:00.17</td>
<td>36.879</td>
<td>-115.936</td>
<td>1010</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:45:00.15</td>
<td>37.160</td>
<td>-116.071</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:09:59.16</td>
<td>37.124</td>
<td>-116.090</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>21:10:01.04</td>
<td>37.026</td>
<td>-116.030</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:10:01.04</td>
<td>37.023</td>
<td>-116.060</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:10:00.04</td>
<td>37.046</td>
<td>-116.030</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:45:00.04</td>
<td>37.001</td>
<td>-116.020</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:02:00.16</td>
<td>37.166</td>
<td>-116.057</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:50:00.16</td>
<td>37.113</td>
<td>-116.082</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:00:00.08</td>
<td>37.004</td>
<td>-116.016</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:00:00.04</td>
<td>37.005</td>
<td>-116.021</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:32:00.16</td>
<td>37.122</td>
<td>-116.085</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:42:00.05</td>
<td>37.007</td>
<td>-116.017</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:15:00.04</td>
<td>37.208</td>
<td>-116.210</td>
<td>2199</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.112</td>
<td>-116.085</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:10:00.16</td>
<td>37.121</td>
<td>-116.089</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.05</td>
<td>37.065</td>
<td>-116.003</td>
<td>1245</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:20:00.16</td>
<td>37.116</td>
<td>-116.086</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:41:00.19</td>
<td>36.993</td>
<td>-116.023</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:03.16</td>
<td>37.135</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.07</td>
<td>37.070</td>
<td>-115.993</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

**Operation Toggle**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:16:00.16</td>
<td>37.214</td>
<td>-116.184</td>
<td>2113</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:30:00.06</td>
<td>37.012</td>
<td>-116.016</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Toggle -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>708</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cebolla</td>
<td>08/09/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuchillo</td>
<td>08/09/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solano</td>
<td>08/09/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>709</td>
<td>09/21/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U7z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>710</td>
<td>09/26/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>711</td>
<td>11/09/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>712</td>
<td>11/09/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ci</td>
<td></td>
<td></td>
</tr>
<tr>
<td>713</td>
<td>11/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsyz26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canna-Umbrinus</td>
<td>11/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsyz26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canna-Limoges</td>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>714</td>
<td>12/12/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>715</td>
<td>12/14/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsw24.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>716</td>
<td>12/21/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>717</td>
<td>12/21/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flax-Test</td>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>718</td>
<td>02/14/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>719</td>
<td>03/08/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>720</td>
<td>03/23/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2do</td>
<td></td>
<td></td>
</tr>
<tr>
<td>721</td>
<td>04/05/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>722</td>
<td>04/25/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angus</td>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td>U3jk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>723</td>
<td>04/26/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>724</td>
<td>04/26/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>725</td>
<td>05/09/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jd</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>726</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-3</strong></td>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Simultaneous, same hole</strong></td>
<td>Joint Government/industry gas stimulation experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>727</td>
<td>05/24/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U7h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>728</td>
<td>05/24/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10av</td>
<td></td>
<td></td>
</tr>
<tr>
<td>729</td>
<td>06/05/1973</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>730</td>
<td>06/06/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U19v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>731</td>
<td>06/21/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U7af</td>
<td></td>
<td></td>
</tr>
<tr>
<td>732</td>
<td>06/28/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>733</td>
<td>06/28/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>13:31:10.04</td>
<td>37.007</td>
<td>-116.020</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:31:10.04</td>
<td>37.004</td>
<td>-116.020</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:31:10.04</td>
<td>37.003</td>
<td>-116.018</td>
<td>1179</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.19</td>
<td>37.082</td>
<td>-116.037</td>
<td>1225</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>14:30:00.16</td>
<td>37.121</td>
<td>-116.087</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>15 kt</td>
</tr>
<tr>
<td>15:15:00.16</td>
<td>37.162</td>
<td>-116.034</td>
<td>1295</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:15:00.16</td>
<td>37.121</td>
<td>-116.033</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.140</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:00:00.16</td>
<td>37.140</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.04</td>
<td>37.031</td>
<td>-116.022</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.138</td>
<td>-116.036</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:15:00.24</td>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:15:24.35</td>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>20:15:24.35</td>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.147</td>
<td>-116.051</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:10:00.19</td>
<td>37.104</td>
<td>-116.028</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>20:15:00.17</td>
<td>37.117</td>
<td>-116.088</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:50:00.16</td>
<td>37.178</td>
<td>-116.055</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:25:00.03</td>
<td>37.005</td>
<td>-116.029</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:25:00.07</td>
<td>36.994</td>
<td>-116.022</td>
<td>1176</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:15:00.17</td>
<td>37.123</td>
<td>-116.059</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>90 kt</td>
</tr>
<tr>
<td>15:15:00.04</td>
<td>37.012</td>
<td>-116.021</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:30:00.04</td>
<td>37.006</td>
<td>-116.017</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.12</td>
<td>39.793</td>
<td>-108.368</td>
<td>2005</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>33 kt</td>
</tr>
<tr>
<td>16:00:00.12</td>
<td>39.793</td>
<td>-108.367</td>
<td>2005</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>33 kt</td>
</tr>
<tr>
<td>16:00:00.12</td>
<td>39.793</td>
<td>-108.368</td>
<td>2005</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>33 kt</td>
</tr>
<tr>
<td>13:30:00.04</td>
<td>37.078</td>
<td>-116.032</td>
<td>1228</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:30:00.16</td>
<td>37.162</td>
<td>-116.057</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.17</td>
<td>37.185</td>
<td>-116.216</td>
<td>2247</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:00:00.08</td>
<td>37.245</td>
<td>-116.347</td>
<td>2069</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>14:45:00.08</td>
<td>37.092</td>
<td>-116.028</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>19:45:00.16</td>
<td>37.115</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Arbor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>734 Polygonum</td>
<td>10/02/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2by</td>
</tr>
<tr>
<td>735 Waller</td>
<td>10/02/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bz</td>
</tr>
<tr>
<td>736 Husky Ace</td>
<td>10/12/1973</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.07</td>
</tr>
<tr>
<td>737 Bernal</td>
<td>11/28/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jy</td>
</tr>
<tr>
<td>738 Pajara</td>
<td>12/12/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
</tr>
<tr>
<td>739 Seafoam</td>
<td>12/13/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ea</td>
</tr>
<tr>
<td>740 Elida</td>
<td>12/19/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hy</td>
</tr>
<tr>
<td>741 Spar</td>
<td>12/19/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
</tr>
<tr>
<td>742 Pinedrops-Sloat</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
</tr>
<tr>
<td>Pinedrops-Tawny</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
</tr>
<tr>
<td>Pinedrops-Bayou</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>743 Latir</td>
<td>02/27/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4d</td>
</tr>
<tr>
<td>744 Hulsea</td>
<td>03/14/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bx</td>
</tr>
<tr>
<td>745 Sapello</td>
<td>04/12/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ge</td>
</tr>
<tr>
<td>746 Potrero</td>
<td>04/23/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eb</td>
</tr>
<tr>
<td>747 Plomo</td>
<td>05/01/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3f</td>
</tr>
<tr>
<td>748 Jib</td>
<td>05/08/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hb</td>
</tr>
<tr>
<td>749 Grove</td>
<td>05/22/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ds</td>
</tr>
<tr>
<td>750 Fallon</td>
<td>05/23/1974</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2dv</td>
</tr>
<tr>
<td>751 Jara</td>
<td>06/06/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hp</td>
</tr>
<tr>
<td>752 Ming Blade</td>
<td>06/19/1974</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.08</td>
</tr>
<tr>
<td><strong>Operation Bedrock</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>753 Escabosa</td>
<td>07/10/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ac</td>
</tr>
<tr>
<td>754 Crestlake-Tansan</td>
<td>07/18/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dw</td>
</tr>
<tr>
<td>Crestlake-Briar</td>
<td>07/18/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dw</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>755 Puye</td>
<td>08/14/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
</tr>
<tr>
<td>756 Portmanteau</td>
<td>08/30/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ax</td>
</tr>
<tr>
<td>757 Pratt</td>
<td>09/25/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hq</td>
</tr>
<tr>
<td>758 Stanyan</td>
<td>09/26/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2aw</td>
</tr>
<tr>
<td>759 Trumbull</td>
<td>09/26/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4aa</td>
</tr>
<tr>
<td>760 Estaca</td>
<td>10/17/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ja</td>
</tr>
<tr>
<td>761 Hybla Fair</td>
<td>10/28/1974</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.09</td>
</tr>
<tr>
<td>762 Temescal</td>
<td>11/02/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ab</td>
</tr>
<tr>
<td>763 Puddle</td>
<td>11/26/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kg</td>
</tr>
<tr>
<td>764 Keel</td>
<td>12/16/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hu</td>
</tr>
<tr>
<td>765 Portola</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bb</td>
</tr>
<tr>
<td>Portola-Larkin</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bb</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>14:30:00.17</td>
<td>37.159</td>
<td>-116.074</td>
<td>1304</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:15:00.16</td>
<td>37.154</td>
<td>-116.069</td>
<td>1294</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.200</td>
<td>-116.204</td>
<td>2238</td>
<td>Tunnel</td>
</tr>
<tr>
<td>15:30:00.08</td>
<td>37.011</td>
<td>-116.025</td>
<td>1183</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.10</td>
<td>36.991</td>
<td>-116.025</td>
<td>1175</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:17:00.17</td>
<td>37.161</td>
<td>-116.074</td>
<td>1306</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:16:00.11</td>
<td>37.001</td>
<td>-116.032</td>
<td>1178</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:30:00.04</td>
<td>37.006</td>
<td>-116.020</td>
<td>1180</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:38:00.17</td>
<td>37.174</td>
<td>-116.052</td>
<td>1283</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:38:00.17</td>
<td>37.174</td>
<td>-116.052</td>
<td>1283</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:02:00.21</td>
<td>37.031</td>
<td>-115.986</td>
<td>1227</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:55:00.09</td>
<td>37.001</td>
<td>-116.002</td>
<td>1177</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:15:00.17</td>
<td>37.115</td>
<td>-116.076</td>
<td>1264</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.08</td>
<td>37.004</td>
<td>-116.024</td>
<td>1180</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.08</td>
<td>37.210</td>
<td>-116.208</td>
<td>2212</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.075</td>
<td>-116.033</td>
<td>1223</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:12.20</td>
<td>37.119</td>
<td>-116.086</td>
<td>1274</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.11</td>
<td>37.023</td>
<td>-116.037</td>
<td>1188</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.16</td>
<td>37.152</td>
<td>-116.084</td>
<td>1313</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.012</td>
<td>-116.031</td>
<td>1183</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:05:00.17</td>
<td>37.133</td>
<td>-116.069</td>
<td>1275</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.16</td>
<td>37.093</td>
<td>-116.096</td>
<td>1269</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:13:00.12</td>
<td>37.006</td>
<td>-116.016</td>
<td>1180</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.17</td>
<td>37.201</td>
<td>-116.205</td>
<td>2227</td>
<td>Tunnel</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.093</td>
<td>-116.093</td>
<td>1263</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.90</td>
<td>37.001</td>
<td>-116.012</td>
<td>1169</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:30:00.09</td>
<td>37.011</td>
<td>-116.018</td>
<td>1182</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.17</td>
<td>37.178</td>
<td>-116.052</td>
<td>1285</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.178</td>
<td>-116.052</td>
<td>1285</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Operation Bedrock -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>766  Telemé</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cl</td>
</tr>
<tr>
<td>767  Bilge</td>
<td>02/19/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kc</td>
</tr>
<tr>
<td>768  Topgallant</td>
<td>02/28/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U4e</td>
</tr>
<tr>
<td>769  Cabrillo</td>
<td>03/07/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dr</td>
</tr>
<tr>
<td>770  Dining Car</td>
<td>04/05/1975</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.18</td>
</tr>
<tr>
<td>771  Edam</td>
<td>04/24/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dy</td>
</tr>
<tr>
<td>772  Obar</td>
<td>04/30/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ag</td>
</tr>
<tr>
<td>773  Tybo</td>
<td>05/14/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20y</td>
</tr>
<tr>
<td>774  Stilton</td>
<td>06/03/1975</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U20p</td>
</tr>
<tr>
<td>775  Mizzen</td>
<td>06/03/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ah</td>
</tr>
<tr>
<td>776  Alviso</td>
<td>06/11/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2du</td>
</tr>
<tr>
<td>777  Futtock</td>
<td>06/18/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eh</td>
</tr>
<tr>
<td>778  Mast</td>
<td>06/19/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U19u</td>
</tr>
<tr>
<td>779  Camembert</td>
<td>06/26/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19q</td>
</tr>
<tr>
<td>Operation Anvil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>780  Marsh</td>
<td>09/06/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kb</td>
</tr>
<tr>
<td>781  Husky Pup</td>
<td>10/24/1975</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.03</td>
</tr>
<tr>
<td>782  Kasseri</td>
<td>10/28/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20z</td>
</tr>
<tr>
<td>783  Deck</td>
<td>11/18/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kd</td>
</tr>
<tr>
<td>784  Inlet</td>
<td>11/20/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U19f</td>
</tr>
<tr>
<td>785  Leyden</td>
<td>11/26/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cm</td>
</tr>
<tr>
<td>786  Chiberta</td>
<td>12/20/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ek</td>
</tr>
<tr>
<td>787  Muenster</td>
<td>01/03/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19e</td>
</tr>
<tr>
<td>788  Keelson</td>
<td>02/04/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ai</td>
</tr>
<tr>
<td>789  Esrom</td>
<td>02/04/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7ak</td>
</tr>
<tr>
<td>790  Fontina</td>
<td>02/12/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20f</td>
</tr>
<tr>
<td>791  Cheshire</td>
<td>02/14/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20n</td>
</tr>
<tr>
<td>792  Shallows</td>
<td>02/26/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jf</td>
</tr>
<tr>
<td>793  Estuary</td>
<td>03/09/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U19g</td>
</tr>
<tr>
<td>794  Colby</td>
<td>03/14/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aa</td>
</tr>
<tr>
<td>795  Pool</td>
<td>03/17/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U19p</td>
</tr>
<tr>
<td>796  Strait</td>
<td>03/17/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U4a</td>
</tr>
<tr>
<td>797  Mighty Epic</td>
<td>05/12/1976</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.10</td>
</tr>
<tr>
<td>798  Rivoli</td>
<td>05/20/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eg</td>
</tr>
<tr>
<td>Accidental release of radioactivity detected onsite only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>799  Billet</td>
<td>07/27/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7an</td>
</tr>
<tr>
<td>800  Banon</td>
<td>08/26/1976</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2dz</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>July 1945 through September 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation Bedrock -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:13:00.17</td>
<td>37.114</td>
<td>-116.022</td>
<td>1300</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:10:00.22</td>
<td>37.002</td>
<td>-116.025</td>
<td>1179</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:15:00.09</td>
<td>37.106</td>
<td>-116.057</td>
<td>1245</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.17</td>
<td>37.134</td>
<td>-116.085</td>
<td>1288</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:45:00.19</td>
<td>37.188</td>
<td>-116.215</td>
<td>2238</td>
<td>Tunnel</td>
</tr>
<tr>
<td>14:10:00.17</td>
<td>37.116</td>
<td>-116.088</td>
<td>1272</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:01.90</td>
<td>37.109</td>
<td>-116.030</td>
<td>1279</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.221</td>
<td>-116.475</td>
<td>1880</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:20:00.17</td>
<td>37.340</td>
<td>-116.524</td>
<td>1667</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.11</td>
<td>37.095</td>
<td>-116.037</td>
<td>1247</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.17</td>
<td>37.112</td>
<td>-116.075</td>
<td>1261</td>
<td>Shaft</td>
</tr>
<tr>
<td>11:49:00.09</td>
<td>37.066</td>
<td>-116.023</td>
<td>1221</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.09</td>
<td>37.350</td>
<td>-116.321</td>
<td>2068</td>
<td>Shaft</td>
</tr>
<tr>
<td>12:30:00.16</td>
<td>37.279</td>
<td>-116.369</td>
<td>2033</td>
<td>Shaft</td>
</tr>
<tr>
<td><strong>Operation Anvil</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:00:00.11</td>
<td>37.024</td>
<td>-116.029</td>
<td>1187</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:11:26.09</td>
<td>37.222</td>
<td>-116.181</td>
<td>2036</td>
<td>Tunnel</td>
</tr>
<tr>
<td>14:30:00.16</td>
<td>37.290</td>
<td>-116.412</td>
<td>1957</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.11</td>
<td>37.020</td>
<td>-116.022</td>
<td>1185</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.225</td>
<td>-116.368</td>
<td>2025</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.117</td>
<td>-116.020</td>
<td>1303</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.16</td>
<td>37.128</td>
<td>-116.062</td>
<td>1264</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:15:00.16</td>
<td>37.297</td>
<td>-116.334</td>
<td>2082</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:20:00.11</td>
<td>37.069</td>
<td>-116.031</td>
<td>1218</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:40:00.16</td>
<td>37.107</td>
<td>-116.038</td>
<td>1258</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:45:00.16</td>
<td>37.271</td>
<td>-116.489</td>
<td>1837</td>
<td>Shaft</td>
</tr>
<tr>
<td>11:30:00.16</td>
<td>37.243</td>
<td>-116.421</td>
<td>1947</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:50:00.09</td>
<td>37.028</td>
<td>-116.017</td>
<td>1188</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.310</td>
<td>-116.365</td>
<td>2025</td>
<td>Shaft</td>
</tr>
<tr>
<td>12:30:00.16</td>
<td>37.306</td>
<td>-116.472</td>
<td>1904</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:15:00.09</td>
<td>37.256</td>
<td>-116.329</td>
<td>2076</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:45:00.09</td>
<td>37.107</td>
<td>-116.053</td>
<td>1243</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:50:00.17</td>
<td>37.209</td>
<td>-116.213</td>
<td>2224</td>
<td>Tunnel</td>
</tr>
<tr>
<td>17:30:00.16</td>
<td>37.137</td>
<td>-116.067</td>
<td>1279</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:30:00.08</td>
<td>37.075</td>
<td>-116.045</td>
<td>1222</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:30:00.17</td>
<td>37.125</td>
<td>-116.083</td>
<td>1275</td>
<td>Shaft</td>
</tr>
</tbody>
</table>
## United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>801</td>
<td>Operation Fulcrum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>802</td>
<td>Sprit</td>
<td>11/10/1976</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>803</td>
<td>Chevre</td>
<td>11/23/1976</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>804</td>
<td>Redmud</td>
<td>12/08/1976</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>805</td>
<td>Asiago</td>
<td>12/21/1976</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>806</td>
<td>Sutter</td>
<td>12/21/1976</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>807</td>
<td>Rudder</td>
<td>12/28/1976</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>808</td>
<td>Cove, Oarlock</td>
<td>02/16/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td></td>
<td>Simultaneous, separate holes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>809</td>
<td>Dofino</td>
<td>03/08/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>810</td>
<td>Marsilly</td>
<td>04/05/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>811</td>
<td>Bulkhead</td>
<td>04/27/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>812</td>
<td>Crewline</td>
<td>05/25/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>813</td>
<td>Forefoot</td>
<td>06/02/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>814</td>
<td>Carnelian</td>
<td>07/28/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>815</td>
<td>Strake</td>
<td>08/04/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>816</td>
<td>Flotost</td>
<td>08/16/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>817</td>
<td>Gruyere, Gruyere-Gradino</td>
<td>08/16/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td></td>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>818</td>
<td>Scantling</td>
<td>08/19/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>819</td>
<td>Scupper</td>
<td>08/19/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>820</td>
<td>Ebbtide</td>
<td>09/15/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>821</td>
<td>Coulommiers</td>
<td>09/27/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>822</td>
<td>Bobstay</td>
<td>10/26/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>823</td>
<td>Hybla Gold</td>
<td>11/01/1977</td>
<td>LANL/DoD</td>
<td>NTS</td>
</tr>
<tr>
<td>824</td>
<td>Sandreef</td>
<td>11/09/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>825</td>
<td>Seamount</td>
<td>11/17/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>826</td>
<td>Farallones</td>
<td>12/14/1977</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>827</td>
<td>Rib</td>
<td>12/14/1977</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>828</td>
<td>Campos</td>
<td>02/13/1978</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>829</td>
<td>Reblochon</td>
<td>02/23/1978</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>830</td>
<td>Karab</td>
<td>03/16/1978</td>
<td>LLNL</td>
<td>NTS</td>
</tr>
<tr>
<td>831</td>
<td>Iceberg</td>
<td>03/23/1978</td>
<td>LANL</td>
<td>NTS</td>
</tr>
<tr>
<td>832</td>
<td>Topmast</td>
<td>03/23/1978</td>
<td>LANL</td>
<td>NTS</td>
</tr>
</tbody>
</table>
## July 1945 through September 1992

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Fulcrum</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:30:00.16</td>
<td>37.135</td>
<td>-116.063</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:58:00.08</td>
<td>37.036</td>
<td>-116.018</td>
<td>1192</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:15:00.16</td>
<td>37.172</td>
<td>-116.054</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:49:30.08</td>
<td>37.079</td>
<td>-116.002</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:09:00.17</td>
<td>37.124</td>
<td>-116.068</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:58:00.16</td>
<td>37.152</td>
<td>-116.064</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:00:00.08</td>
<td>37.100</td>
<td>-116.037</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:53:00.16</td>
<td>37.007</td>
<td>-116.032</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:53:00.07</td>
<td>37.013</td>
<td>-116.029</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:24:00.16</td>
<td>37.176</td>
<td>-116.054</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:24:00.16</td>
<td>37.176</td>
<td>-116.054</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.17</td>
<td>37.120</td>
<td>-116.063</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.08</td>
<td>37.095</td>
<td>-116.029</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.094</td>
<td>-116.046</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:15:00.10</td>
<td>37.055</td>
<td>-116.026</td>
<td>1207</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:07:00.16</td>
<td>37.098</td>
<td>-116.092</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:40:00.07</td>
<td>37.087</td>
<td>-116.008</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:49:00.17</td>
<td>37.147</td>
<td>-116.064</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:41:00.16</td>
<td>37.145</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:41:00.16</td>
<td>37.145</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:55:00.10</td>
<td>37.110</td>
<td>-116.055</td>
<td>1246</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:32:00.10</td>
<td>37.018</td>
<td>-116.032</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:36:30.08</td>
<td>37.033</td>
<td>-116.044</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.151</td>
<td>-116.068</td>
<td>1292</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td><strong>Operation Cresset</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:15:00.08</td>
<td>37.008</td>
<td>-116.018</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:06:00.07</td>
<td>37.188</td>
<td>-116.214</td>
<td>2239</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:00:00.08</td>
<td>37.072</td>
<td>-116.051</td>
<td>1221</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>19:30:00.08</td>
<td>37.021</td>
<td>-116.026</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.136</td>
<td>-116.087</td>
<td>1290</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.17</td>
<td>37.018</td>
<td>-116.019</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:53:00.16</td>
<td>37.126</td>
<td>-116.033</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.16</td>
<td>37.124</td>
<td>-116.065</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.085</td>
<td>-116.082</td>
<td>1247</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.20</td>
<td>37.102</td>
<td>-116.052</td>
<td>1239</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:30:00.11</td>
<td>37.099</td>
<td>-116.020</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Cresset -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>833 Backbeach</td>
<td>04/11/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U19x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>834 Fondutta</td>
<td>04/11/1978</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U19zs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>835 Asco</td>
<td>04/25/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>836 Transom</td>
<td>05/10/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U4f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device was destroyed by Hearts detonation on 09/06/1979</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>837 Jackpots</td>
<td>06/01/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>838 Satz</td>
<td>07/07/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>839 Lowball</td>
<td>07/12/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7av</td>
<td></td>
<td></td>
</tr>
<tr>
<td>840 Panir</td>
<td>08/31/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>841 Diablo Hawk</td>
<td>09/13/1978</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.10a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>842 Draughts</td>
<td>09/27/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7al</td>
<td></td>
<td></td>
</tr>
<tr>
<td>843 Rummy</td>
<td>09/27/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7au</td>
<td></td>
<td></td>
</tr>
<tr>
<td>844 Cremino-Caerphilly Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>844 Cremino</td>
<td>09/27/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation Quicksilver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>845 Emmenthal</td>
<td>11/02/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>846 Quargel</td>
<td>11/18/1978</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2fb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>847 Concentration</td>
<td>12/01/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>848 Farm</td>
<td>12/16/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>849 Baccarat</td>
<td>01/24/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>850 Quinella</td>
<td>02/08/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U4l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>851 Kloster</td>
<td>02/15/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>852 Memory</td>
<td>03/14/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>853 Freezout</td>
<td>05/11/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>854 Pepato</td>
<td>06/11/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>855 Chess</td>
<td>06/20/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U7at</td>
<td></td>
<td></td>
</tr>
<tr>
<td>856 Fajy</td>
<td>06/28/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>857 Burzet</td>
<td>08/03/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>858 Offshore</td>
<td>08/08/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>859 Nessel</td>
<td>08/29/1979</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2ep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>860 Hearts Detonation destroyed undetonated Transom device from 05/10/1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>860 Hearts</td>
<td>09/06/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U4n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>861 Pera</td>
<td>09/08/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>862 Sheepshead</td>
<td>09/26/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U19aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>17:45:00.07</td>
<td>37.233</td>
<td>-116.369</td>
<td>2040</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.300</td>
<td>-116.328</td>
<td>2072</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>14:35:00.16</td>
<td>37.155</td>
<td>-116.036</td>
<td>1285</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.088</td>
<td>-116.053</td>
<td>1231</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Zero</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.021</td>
<td>-116.033</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.17</td>
<td>37.122</td>
<td>-116.078</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.079</td>
<td>-116.045</td>
<td>1225</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>14:00:00.16</td>
<td>37.276</td>
<td>-116.358</td>
<td>2013</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:15:00.16</td>
<td>37.209</td>
<td>-116.212</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.07</td>
<td>37.074</td>
<td>-116.021</td>
<td>1234</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:20:00.08</td>
<td>37.080</td>
<td>-116.052</td>
<td>1226</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:30:00.17</td>
<td>37.171</td>
<td>-116.088</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.17</td>
<td>37.171</td>
<td>-116.088</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

**Operation Quicksilver**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:25:00.17</td>
<td>37.288</td>
<td>-116.298</td>
<td>2104</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:00:00.17</td>
<td>37.127</td>
<td>-116.085</td>
<td>1275</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:07:30.07</td>
<td>37.030</td>
<td>-116.025</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.16</td>
<td>37.273</td>
<td>-116.411</td>
<td>1979</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>18:00:00.10</td>
<td>37.105</td>
<td>-116.013</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:00:00.09</td>
<td>37.102</td>
<td>-116.056</td>
<td>1241</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>18:05:00.16</td>
<td>37.152</td>
<td>-116.073</td>
<td>1297</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>18:30:00.10</td>
<td>37.028</td>
<td>-116.041</td>
<td>1190</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.10</td>
<td>36.998</td>
<td>-116.019</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.17</td>
<td>37.290</td>
<td>-116.456</td>
<td>1913</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:13.54</td>
<td>37.108</td>
<td>-116.016</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:44:00.17</td>
<td>37.143</td>
<td>-116.088</td>
<td>1303</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:07:30.16</td>
<td>37.084</td>
<td>-116.071</td>
<td>1235</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.11</td>
<td>37.015</td>
<td>-116.009</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:08:00.17</td>
<td>37.121</td>
<td>-116.067</td>
<td>1260</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.088</td>
<td>-116.054</td>
<td>1232</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>140 kt</td>
</tr>
<tr>
<td>17:02:00.09</td>
<td>37.155</td>
<td>-116.039</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.229</td>
<td>-116.365</td>
<td>2033</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>863</td>
<td>Backgammon</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>864</td>
<td>Azul</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2em</td>
<td></td>
<td></td>
</tr>
<tr>
<td>865</td>
<td>Tarko</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>866</td>
<td>Norbo</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>867</td>
<td>Liptauer</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>868</td>
<td>Pyramid</td>
<td>LANL</td>
<td>NTS</td>
<td>U7be</td>
<td></td>
<td></td>
</tr>
<tr>
<td>869</td>
<td>Colwick</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20ac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>870</td>
<td>Canfield</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>871</td>
<td>Flora</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>872</td>
<td>Kash</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20af</td>
<td></td>
<td></td>
</tr>
<tr>
<td>873</td>
<td>Huron King</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U3ky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>874</td>
<td>Tafi</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>875</td>
<td>Verdello</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ku</td>
<td></td>
<td></td>
</tr>
<tr>
<td>876</td>
<td>Bonarda</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3gv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>877</td>
<td>Riola</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>878</td>
<td>Dutchess</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U7bm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>879</td>
<td>Miners Iron</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>880</td>
<td>Dauphin</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cq</td>
<td></td>
<td></td>
</tr>
<tr>
<td>881</td>
<td>Serpa</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U19ai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>882</td>
<td>Baseball</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>883</td>
<td>Clairette</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>884</td>
<td>Seco</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>885</td>
<td>Vide</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>886</td>
<td>Aligote</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>887</td>
<td>Harzer</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19aj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>888</td>
<td>Niza</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>889</td>
<td>Pineau</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7ao</td>
<td></td>
<td></td>
</tr>
<tr>
<td>890</td>
<td>Havarti</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>891</td>
<td>Islay</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2er</td>
<td></td>
<td></td>
</tr>
<tr>
<td>892</td>
<td>Trebbiano</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>893</td>
<td>Cernada</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operation Guardian**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>878</td>
<td>Dutchess</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U7bm</td>
</tr>
<tr>
<td>879</td>
<td>Miners Iron</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.11</td>
</tr>
<tr>
<td>880</td>
<td>Dauphin</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cq</td>
</tr>
<tr>
<td>881</td>
<td>Serpa</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U19ai</td>
</tr>
<tr>
<td>882</td>
<td>Baseball</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ba</td>
</tr>
<tr>
<td>883</td>
<td>Clairette</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kr</td>
</tr>
<tr>
<td>884</td>
<td>Seco</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8l</td>
</tr>
<tr>
<td>885</td>
<td>Vide</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8k</td>
</tr>
<tr>
<td>886</td>
<td>Aligote</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bg</td>
</tr>
<tr>
<td>887</td>
<td>Harzer</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19aj</td>
</tr>
<tr>
<td>888</td>
<td>Niza</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cr</td>
</tr>
<tr>
<td>889</td>
<td>Pineau</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7ao</td>
</tr>
<tr>
<td>890</td>
<td>Havarti</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bg</td>
</tr>
<tr>
<td>891</td>
<td>Islay</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2er</td>
</tr>
<tr>
<td>892</td>
<td>Trebbiano</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lj</td>
</tr>
<tr>
<td>893</td>
<td>Cernada</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kk</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Operation Tinderbox</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>36.994</td>
<td>-116.025</td>
<td>1175</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.09</td>
<td>37.137</td>
<td>-116.064</td>
<td>1275</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.127</td>
<td>-116.089</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:35:00.09</td>
<td>37.180</td>
<td>-116.084</td>
<td>1349</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.150</td>
<td>-116.083</td>
<td>1304</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.09</td>
<td>37.101</td>
<td>-116.031</td>
<td>1266</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.248</td>
<td>-116.423</td>
<td>1946</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:46:30.09</td>
<td>37.056</td>
<td>-116.020</td>
<td>1211</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.09</td>
<td>37.003</td>
<td>-116.032</td>
<td>1179</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:15:00.09</td>
<td>37.282</td>
<td>-116.455</td>
<td>1911</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.07</td>
<td>37.023</td>
<td>-116.035</td>
<td>1187</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:05:00.08</td>
<td>37.256</td>
<td>-116.478</td>
<td>1859</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:19:00.09</td>
<td>37.013</td>
<td>-116.024</td>
<td>1183</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:45:00.09</td>
<td>37.056</td>
<td>-116.049</td>
<td>1209</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:26:30.08</td>
<td>37.116</td>
<td>-116.065</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td><strong>Operation Guardian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19:15:00.12</td>
<td>37.075</td>
<td>-116.000</td>
<td>1265</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.09</td>
<td>37.211</td>
<td>-116.206</td>
<td>2212</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:50:00.08</td>
<td>37.111</td>
<td>-116.020</td>
<td>1306</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:10:00.09</td>
<td>37.325</td>
<td>-116.316</td>
<td>2028</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:25:00.09</td>
<td>37.087</td>
<td>-116.046</td>
<td>1232</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.12</td>
<td>37.011</td>
<td>-116.033</td>
<td>1182</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.08</td>
<td>37.182</td>
<td>-116.085</td>
<td>1356</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:35:00.08</td>
<td>37.177</td>
<td>-116.086</td>
<td>1346</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.102</td>
<td>-116.005</td>
<td>1311</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.08</td>
<td>37.303</td>
<td>-116.326</td>
<td>2073</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.10</td>
<td>37.129</td>
<td>-116.035</td>
<td>1266</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>37.089</td>
<td>-116.020</td>
<td>1259</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:41:00.09</td>
<td>37.154</td>
<td>-116.036</td>
<td>1283</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:31:00.09</td>
<td>37.160</td>
<td>-116.067</td>
<td>1297</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>37.058</td>
<td>-116.049</td>
<td>1211</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.008</td>
<td>-116.025</td>
<td>1181</td>
<td>Shaft</td>
</tr>
<tr>
<td>Test</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Operation Praetorian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paliza</td>
<td>10/01/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bd</td>
</tr>
<tr>
<td>Tilci</td>
<td>11/11/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U4ak</td>
</tr>
<tr>
<td>Rousanne</td>
<td>11/12/1981</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U4p</td>
</tr>
<tr>
<td>Akavi</td>
<td>12/03/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2es</td>
</tr>
<tr>
<td>Caboc</td>
<td>12/16/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cp</td>
</tr>
<tr>
<td>Jornada</td>
<td>01/28/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U4j</td>
</tr>
<tr>
<td>Molbo</td>
<td>02/12/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ag</td>
</tr>
<tr>
<td>Hosta</td>
<td>02/12/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ak</td>
</tr>
<tr>
<td>Tenaja</td>
<td>04/17/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lh</td>
</tr>
<tr>
<td>Gibne</td>
<td>04/25/1982</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20ah</td>
</tr>
<tr>
<td>Krywdost</td>
<td>05/06/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2co</td>
</tr>
<tr>
<td>Bouschet</td>
<td>05/07/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3la</td>
</tr>
<tr>
<td>Kesti</td>
<td>06/16/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cn</td>
</tr>
<tr>
<td>Nebbiolo</td>
<td>06/24/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ae</td>
</tr>
<tr>
<td>Monterey</td>
<td>07/29/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4aj</td>
</tr>
<tr>
<td>Atrisco</td>
<td>08/05/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bp</td>
</tr>
<tr>
<td>Queso</td>
<td>08/11/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bf</td>
</tr>
<tr>
<td>Cerro</td>
<td>09/02/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lf</td>
</tr>
<tr>
<td>Huron Landing Simultaneous with Diamond Ace</td>
<td>09/23/1982</td>
<td>LLNL/LANL/DoD</td>
<td>NTS</td>
<td>U12n.15</td>
</tr>
<tr>
<td>Diamond Ace Simultaneous with Huron Landing</td>
<td>09/23/1982</td>
<td>LLNL/LANL/DoD</td>
<td>NTS</td>
<td>U12n.15</td>
</tr>
<tr>
<td>Frisco</td>
<td>09/23/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8m</td>
</tr>
<tr>
<td>Borrego</td>
<td>09/29/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U7br</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation Phalanx</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seyval</td>
<td>11/12/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lm</td>
</tr>
<tr>
<td>Manteca</td>
<td>12/10/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4al</td>
</tr>
<tr>
<td>Coalora</td>
<td>02/11/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lo</td>
</tr>
<tr>
<td>Cheedam</td>
<td>02/17/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2et</td>
</tr>
<tr>
<td>Cabra</td>
<td>03/26/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aj</td>
</tr>
<tr>
<td>Turquoise</td>
<td>04/14/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bu</td>
</tr>
<tr>
<td>Armada</td>
<td>04/22/1983</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U9cs</td>
</tr>
<tr>
<td>Crowdie</td>
<td>05/05/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fe</td>
</tr>
<tr>
<td>Mini Jade</td>
<td>05/26/1983</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.12</td>
</tr>
<tr>
<td>Fahada</td>
<td>05/26/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bh</td>
</tr>
<tr>
<td>Danablu</td>
<td>06/09/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eu</td>
</tr>
<tr>
<td>Laban</td>
<td>08/03/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ff</td>
</tr>
<tr>
<td>Sabado</td>
<td>08/11/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lc</td>
</tr>
<tr>
<td>Jarlsberg</td>
<td>08/27/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ca</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Operation Praetorian</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19:00:00.10</td>
<td>37.082</td>
<td>-116.010</td>
<td>1260</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:09.09</td>
<td>37.076</td>
<td>-116.069</td>
<td>1232</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>37.108</td>
<td>-116.050</td>
<td>1243</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>37.148</td>
<td>-116.072</td>
<td>1293</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:05:00.09</td>
<td>37.114</td>
<td>-116.124</td>
<td>1348</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.10</td>
<td>37.091</td>
<td>-116.052</td>
<td>1233</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:55:00.08</td>
<td>37.224</td>
<td>-116.464</td>
<td>1873</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:25:00.09</td>
<td>37.348</td>
<td>-116.317</td>
<td>2076</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:00:00.09</td>
<td>37.017</td>
<td>-116.011</td>
<td>1177</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:05:00.09</td>
<td>37.256</td>
<td>-116.423</td>
<td>1937</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:00:00.08</td>
<td>37.117</td>
<td>-116.128</td>
<td>1363</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:17:00.11</td>
<td>37.069</td>
<td>-116.046</td>
<td>1217</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.114</td>
<td>-116.017</td>
<td>1312</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:15:00.09</td>
<td>37.236</td>
<td>-116.371</td>
<td>2038</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:05:00.08</td>
<td>37.102</td>
<td>-116.076</td>
<td>1253</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.084</td>
<td>-116.007</td>
<td>1268</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.00</td>
<td>37.190</td>
<td>-116.049</td>
<td>1310</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.020</td>
<td>-116.017</td>
<td>1184</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.212</td>
<td>-116.208</td>
<td>1824</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.212</td>
<td>-116.208</td>
<td>1824</td>
<td>Tunnel</td>
</tr>
<tr>
<td>17:00:00.09</td>
<td>37.175</td>
<td>-116.089</td>
<td>1347</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.10</td>
<td>37.091</td>
<td>-116.046</td>
<td>1234</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

| **Operation Phalanx** | | | | | | |
| 19:17:00.10 | 37.024 | -116.033 | 1187 | Shaft | Weapons Related | Less than 20 kt | 916 |
| 15:20:00.09 | 37.080 | -116.073 | 1236 | Shaft | Weapons Related | 20 to 150 kt | 917 |
| 16:00:00.10 | 37.056 | -116.046 | 1210 | Shaft | Weapons Related | Less than 20 kt | 918 |
| 17:00:00.09 | 37.163 | -116.064 | 1293 | Shaft | Weapons Related | Less than 20 kt | 919 |
| 20:20:00.09 | 37.301 | -116.461 | 1907 | Shaft | Weapons Related | 20 to 150 kt | 920 |
| 19:05:00.12 | 37.073 | -116.047 | 1219 | Shaft | Weapons Related | Less than 150 kt | 921 |
| 13:53:00.08 | 37.111 | -116.023 | 1296 | Shaft | Joint US-UK | Less than 20 kt | 922 |
| 15:20:00.08 | 37.146 | -116.090 | 1309 | Shaft | Weapons Related | Less than 20 kt | 923 |
| 14:30:00.09 | 37.209 | -116.206 | 1828 | Tunnel | Weapons Effects | Less than 20 kt | 924 |
| 15:00:00.09 | 37.103 | -116.007 | 1312 | Shaft | Weapons Related | Less than 20 kt | 925 |
| 17:10:00.09 | 37.158 | -116.090 | 1327 | Shaft | Weapons Related | Less than 20 kt | 926 |
| 13:33:00.10 | 37.119 | -116.090 | 1276 | Shaft | Weapons Related | Less than 20 kt | 927 |
| 14:00:00.12 | 36.998 | -116.004 | 1175 | Shaft | Weapons Related | Less than 20 kt | 928 |
| 14:00:00.09 | 37.193 | -116.035 | 1318 | Shaft | Weapons Related | Less than 20 kt | 929 |
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Phalanx -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>930 Chancellor</td>
<td>09/01/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ad</td>
</tr>
<tr>
<td>931 Tomme/Midnight Zephyr</td>
<td>09/21/1983</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.18</td>
</tr>
<tr>
<td>932 Branco</td>
<td>09/21/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ew</td>
</tr>
<tr>
<td>Branco-Herkimer Simultaneous, same hole</td>
<td>09/21/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ew</td>
</tr>
<tr>
<td>933 Techado</td>
<td>09/22/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U4o</td>
</tr>
<tr>
<td>934 Navata</td>
<td>09/29/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lb</td>
</tr>
<tr>
<td>Operation Fusileer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>935 Muggins</td>
<td>12/09/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ls</td>
</tr>
<tr>
<td>936 Romano</td>
<td>12/16/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ex</td>
</tr>
<tr>
<td>937 Gorbea</td>
<td>01/31/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cq</td>
</tr>
<tr>
<td>938 Midas Myth/Milagro</td>
<td>02/15/1984</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12t.04</td>
</tr>
<tr>
<td>939 Tortugas</td>
<td>03/01/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gg</td>
</tr>
<tr>
<td>940 Agrini Accidental release of radioactivity detected onsite only</td>
<td>03/31/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ev</td>
</tr>
<tr>
<td>941 Mundo</td>
<td>05/01/1984</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7bo</td>
</tr>
<tr>
<td>942 Orkney</td>
<td>05/02/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10be</td>
</tr>
<tr>
<td>943 Bellow</td>
<td>05/16/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ac</td>
</tr>
<tr>
<td>944 Caprock</td>
<td>05/31/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U4q</td>
</tr>
<tr>
<td>945 Duoro</td>
<td>06/20/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lv</td>
</tr>
<tr>
<td>946 Normanna</td>
<td>07/12/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10cb</td>
</tr>
<tr>
<td>947 Kappeli</td>
<td>07/25/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20am</td>
</tr>
<tr>
<td>948 Correo</td>
<td>08/02/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lw</td>
</tr>
<tr>
<td>949 Dolcetto</td>
<td>08/30/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bi</td>
</tr>
<tr>
<td>950 Wexford</td>
<td>08/30/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cr</td>
</tr>
<tr>
<td>951 Breton</td>
<td>09/13/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ar</td>
</tr>
<tr>
<td>Operation Grenadier</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>952 Vermejo</td>
<td>10/02/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U4r</td>
</tr>
<tr>
<td>953 Villita</td>
<td>11/10/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ld</td>
</tr>
<tr>
<td>954 Egmont</td>
<td>12/09/1984</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20al</td>
</tr>
<tr>
<td>955 Tierra</td>
<td>12/15/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ac</td>
</tr>
<tr>
<td>956 Minero</td>
<td>12/20/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lt</td>
</tr>
<tr>
<td>957 Vaughn</td>
<td>03/15/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lr</td>
</tr>
<tr>
<td>958 Cottage</td>
<td>03/23/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8j</td>
</tr>
<tr>
<td>959 Hermosa</td>
<td>04/02/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bs</td>
</tr>
<tr>
<td>960 Misty Rain Controlled release of radioactivity detected offsite</td>
<td>04/06/1985</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.17</td>
</tr>
<tr>
<td>961 Towanda</td>
<td>05/02/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ab</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.273</td>
<td>-116.356</td>
<td>2013</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.210</td>
<td>-116.210</td>
<td>2230</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:25:00.08</td>
<td>37.121</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.12</td>
<td>37.106</td>
<td>-116.050</td>
<td>1241</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.053</td>
<td>-116.021</td>
<td>1207</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Phalanx -- Continued**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00:00.11</td>
<td>37.013</td>
<td>-116.047</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:30:00.09</td>
<td>37.140</td>
<td>-116.073</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:30:00.08</td>
<td>37.113</td>
<td>-116.123</td>
<td>1344</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:00:00.11</td>
<td>37.221</td>
<td>-116.182</td>
<td>2044</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:45:00.09</td>
<td>37.066</td>
<td>-116.047</td>
<td>1216</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>14:30:00.08</td>
<td>37.146</td>
<td>-116.085</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:05:00.09</td>
<td>37.106</td>
<td>-116.023</td>
<td>1292</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>13:50:00.09</td>
<td>37.198</td>
<td>-116.055</td>
<td>1351</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:00:00.08</td>
<td>37.092</td>
<td>-116.094</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>13:04:00.10</td>
<td>37.103</td>
<td>-116.049</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:15:00.09</td>
<td>37.000</td>
<td>-116.044</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.192</td>
<td>-116.035</td>
<td>1315</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:30:00.08</td>
<td>37.268</td>
<td>-116.412</td>
<td>1982</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>37.017</td>
<td>-116.009</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:45:00.10</td>
<td>37.090</td>
<td>-116.000</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:45:00.00</td>
<td>37.144</td>
<td>-116.126</td>
<td>1376</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:00:00.00</td>
<td>37.087</td>
<td>-116.072</td>
<td>1238</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
</tbody>
</table>

**Operation Fusileer**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:14:00.10</td>
<td>37.085</td>
<td>-116.054</td>
<td>1229</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:40:00.09</td>
<td>37.000</td>
<td>-116.018</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>19:40:00.09</td>
<td>37.270</td>
<td>-116.498</td>
<td>1839</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>14:45:00.00</td>
<td>37.281</td>
<td>-116.306</td>
<td>2118</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:20:00.11</td>
<td>37.012</td>
<td>-116.046</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:31:00.10</td>
<td>37.058</td>
<td>-116.046</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>18:30:00.08</td>
<td>37.180</td>
<td>-116.090</td>
<td>1362</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>20:00:00.09</td>
<td>37.095</td>
<td>-116.033</td>
<td>1251</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>23:15:00.09</td>
<td>37.201</td>
<td>-116.208</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:20:00.08</td>
<td>37.253</td>
<td>-116.326</td>
<td>2085</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
</tbody>
</table>
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Grenadier -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>962 Salut</td>
<td>06/12/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ak</td>
</tr>
<tr>
<td>963 Ville</td>
<td>06/12/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4am</td>
</tr>
<tr>
<td>964 Maribo</td>
<td>06/26/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cs</td>
</tr>
<tr>
<td>965 Serena</td>
<td>07/25/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20an</td>
</tr>
<tr>
<td>966 Cebrero</td>
<td>08/14/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cw</td>
</tr>
<tr>
<td>967 Chamita</td>
<td>08/17/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lz</td>
</tr>
<tr>
<td>968 Ponil</td>
<td>09/27/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bv</td>
</tr>
<tr>
<td><strong>Operation Charioteer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>969 Mill Yard</td>
<td>10/09/1985</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.20</td>
</tr>
<tr>
<td>970 Diamond Beech</td>
<td>10/09/1985</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.19</td>
</tr>
<tr>
<td>971 Roquefort</td>
<td>10/16/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4as</td>
</tr>
<tr>
<td>972 Abo</td>
<td>10/30/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mc</td>
</tr>
<tr>
<td>973 Kinibito</td>
<td>12/05/1985</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3me</td>
</tr>
<tr>
<td>974 Goldstone</td>
<td>12/28/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ao</td>
</tr>
<tr>
<td>975 Glencoe</td>
<td>03/22/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U4i</td>
</tr>
<tr>
<td>976 Mighty Oak</td>
<td>04/10/1986</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.08</td>
</tr>
<tr>
<td>977 Mogollon</td>
<td>04/20/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U3li</td>
</tr>
<tr>
<td>978 Jefferson</td>
<td>04/22/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ai</td>
</tr>
<tr>
<td>979 Panamint</td>
<td>05/21/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gb</td>
</tr>
<tr>
<td>980 Tajo</td>
<td>06/05/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bl</td>
</tr>
<tr>
<td>981 Darwin</td>
<td>06/25/1986</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20aq</td>
</tr>
<tr>
<td>982 Cybar</td>
<td>07/17/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ar</td>
</tr>
<tr>
<td>983 Cornucopia</td>
<td>07/24/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ga(s)</td>
</tr>
<tr>
<td>984 Galveston</td>
<td>09/04/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U19af</td>
</tr>
<tr>
<td>985 Aleman</td>
<td>09/11/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kz</td>
</tr>
<tr>
<td>986 Labquark</td>
<td>09/30/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19an</td>
</tr>
<tr>
<td><strong>Operation Musketeer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>987 Belmont</td>
<td>10/16/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20as</td>
</tr>
<tr>
<td>988 Gascon</td>
<td>11/14/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U4t</td>
</tr>
<tr>
<td>989 Bodie</td>
<td>12/13/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ap</td>
</tr>
<tr>
<td>990 Hazebrook-Emerald (Green)</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
</tr>
<tr>
<td>990 Hazebrook-Checkerberry (Red)</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
</tr>
<tr>
<td>990 Hazebrook-Apricot (Orange) Simultaneous, same hole</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
</tr>
<tr>
<td>991 Tornero</td>
<td>02/11/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3li</td>
</tr>
<tr>
<td>992 Middle Note</td>
<td>03/18/1987</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.21</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>15:15:00.08</td>
<td>37.248</td>
<td>-116.490</td>
<td>1873</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:30:00.09</td>
<td>37.088</td>
<td>-116.085</td>
<td>1250</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:03:00.08</td>
<td>37.124</td>
<td>-116.123</td>
<td>1352</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.297</td>
<td>-116.439</td>
<td>1942</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:00:00.08</td>
<td>37.111</td>
<td>-116.015</td>
<td>1316</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:25:00.09</td>
<td>37.002</td>
<td>-116.044</td>
<td>1181</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:15:00.08</td>
<td>37.090</td>
<td>-116.003</td>
<td>1284</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Charioteer**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:40:00.13</td>
<td>37.209</td>
<td>-116.206</td>
<td>2203</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>23:20:00.09</td>
<td>37.210</td>
<td>-116.211</td>
<td>2230</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>21:35:00.09</td>
<td>37.110</td>
<td>-116.122</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.051</td>
<td>-116.037</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.053</td>
<td>-116.046</td>
<td>1208</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>19:01:00.09</td>
<td>37.238</td>
<td>-116.474</td>
<td>1887</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:15:00.08</td>
<td>37.083</td>
<td>-116.067</td>
<td>1233</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>29 kt</td>
</tr>
<tr>
<td>14:08:30.10</td>
<td>37.218</td>
<td>-116.184</td>
<td>2084</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:12:30.07</td>
<td>37.012</td>
<td>-116.047</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:30:00.09</td>
<td>37.264</td>
<td>-116.441</td>
<td>1955</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>13:59:00.08</td>
<td>37.125</td>
<td>-116.061</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:04:00.06</td>
<td>37.098</td>
<td>-116.016</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>20:27:45.09</td>
<td>37.265</td>
<td>-116.500</td>
<td>1849</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>21:00:00.06</td>
<td>37.279</td>
<td>-116.356</td>
<td>2017</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>119 kt</td>
</tr>
<tr>
<td>15:05:00.09</td>
<td>37.143</td>
<td>-116.072</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:09:00.06</td>
<td>37.240</td>
<td>-116.369</td>
<td>2018</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>14:57:00.11</td>
<td>37.069</td>
<td>-116.051</td>
<td>1218</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>22:30:00.10</td>
<td>37.300</td>
<td>-116.308</td>
<td>2100</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
</tbody>
</table>

**Operation Musketeer**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>19:25:00.09</td>
<td>37.220</td>
<td>-116.463</td>
<td>1871</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:00:00.07</td>
<td>37.100</td>
<td>-116.049</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:50:05.09</td>
<td>37.263</td>
<td>-116.413</td>
<td>1991</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>15:20:00.08</td>
<td>37.181</td>
<td>-116.049</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:20:00.08</td>
<td>37.181</td>
<td>-116.049</td>
<td>1291</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:45:00.07</td>
<td>37.011</td>
<td>-116.046</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:28:00.09</td>
<td>37.210</td>
<td>-116.209</td>
<td>2223</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

83
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Musketeer -- Continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>993 Delamar</td>
<td>04/18/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20at</td>
</tr>
<tr>
<td>994 Presidio</td>
<td>04/22/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U6d</td>
</tr>
<tr>
<td>995 Hardin</td>
<td>04/30/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20av</td>
</tr>
<tr>
<td>996 Brie</td>
<td>06/18/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10cc</td>
</tr>
<tr>
<td>997 Mission Ghost</td>
<td>06/20/1987</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12t.09</td>
</tr>
<tr>
<td>998 Panchuela</td>
<td>06/30/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mg</td>
</tr>
<tr>
<td>999 Midland</td>
<td>07/16/1987</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7by</td>
</tr>
<tr>
<td>1000 Tahoka</td>
<td>08/13/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mf</td>
</tr>
<tr>
<td>1001 Lockney</td>
<td>09/24/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U19aq</td>
</tr>
<tr>
<td>Operation Touchstone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1002 Borate</td>
<td>10/23/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ge</td>
</tr>
<tr>
<td>1003 Waco</td>
<td>12/01/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lu</td>
</tr>
<tr>
<td>1004 Mission Cyber</td>
<td>12/02/1987</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12p.02</td>
</tr>
<tr>
<td>1005 Kernville</td>
<td>02/15/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ar</td>
</tr>
<tr>
<td>1006 Abilene</td>
<td>04/07/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mn</td>
</tr>
<tr>
<td>1007 Schellbourne</td>
<td>05/13/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gf</td>
</tr>
<tr>
<td>1008 Laredo</td>
<td>05/21/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mh</td>
</tr>
<tr>
<td>1009 Comstock</td>
<td>06/02/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ay</td>
</tr>
<tr>
<td>1010 Rhyolite</td>
<td>Simultaneous with Nightingale</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ey</td>
</tr>
<tr>
<td>1011 Nightingale</td>
<td>Simultaneous with Rhyolite</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ey</td>
</tr>
<tr>
<td>1012 Alamo</td>
<td>07/07/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U19au</td>
</tr>
<tr>
<td>1013 Kearsarge</td>
<td>Joint Verification Experiment</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ax</td>
</tr>
<tr>
<td>1014 Harlingen-A</td>
<td>08/23/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U6g</td>
</tr>
<tr>
<td>1015 Bullfrog</td>
<td>08/30/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4au</td>
</tr>
<tr>
<td>Operation Cornerstone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1016 Dalhart</td>
<td>10/13/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U4u</td>
</tr>
<tr>
<td>1017 Monahans-A</td>
<td>11/09/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lk</td>
</tr>
<tr>
<td>1018 Kawich A-White</td>
<td>12/09/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8n</td>
</tr>
<tr>
<td>1019 Misty Echo</td>
<td>12/10/1988</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.23</td>
</tr>
<tr>
<td>1020 Texarkana</td>
<td>02/10/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ca</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>13:40:00.00</td>
<td>37.248</td>
<td>-116.510</td>
<td>1875</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.09</td>
<td>36.983</td>
<td>-116.005</td>
<td>1171</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:30:00.09</td>
<td>37.233</td>
<td>-116.424</td>
<td>1943</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:20:00.08</td>
<td>37.194</td>
<td>-116.036</td>
<td>1318</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.18</td>
<td>37.220</td>
<td>-116.179</td>
<td>2017</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:05:00.10</td>
<td>36.999</td>
<td>-116.044</td>
<td>1179</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.08</td>
<td>37.104</td>
<td>-116.024</td>
<td>1284</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:00:00.09</td>
<td>37.061</td>
<td>-116.046</td>
<td>1212</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.06</td>
<td>37.228</td>
<td>-116.376</td>
<td>2045</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Touchstone**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00:00.09</td>
<td>37.142</td>
<td>-116.080</td>
<td>1294</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:30:00.09</td>
<td>36.996</td>
<td>-116.005</td>
<td>1176</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.08</td>
<td>37.235</td>
<td>-116.164</td>
<td>1926</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:10:00.09</td>
<td>37.314</td>
<td>-116.472</td>
<td>1899</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>17:15:00.08</td>
<td>37.013</td>
<td>-116.045</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:35:00.11</td>
<td>37.124</td>
<td>-116.073</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>22:30:00.14</td>
<td>37.032</td>
<td>-115.988</td>
<td>1220</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>13:00:00.09</td>
<td>37.260</td>
<td>-116.442</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.166</td>
<td>-116.073</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>14:00:00.08</td>
<td>37.166</td>
<td>-116.073</td>
<td>1309</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>15:05:30.07</td>
<td>37.252</td>
<td>-116.378</td>
<td>1964</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>17:00:00.09</td>
<td>37.297</td>
<td>-116.307</td>
<td>2102</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>100 to 150 kt</td>
</tr>
<tr>
<td>18:30:00.08</td>
<td>36.991</td>
<td>-116.019</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:30:00.08</td>
<td>36.989</td>
<td>-116.019</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>18:00:00.09</td>
<td>37.086</td>
<td>-116.069</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
</tbody>
</table>

**Operation Cornerstone**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00:00.08</td>
<td>37.089</td>
<td>-116.050</td>
<td>1229</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>20:15:00.08</td>
<td>36.991</td>
<td>-116.022</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:15:00.08</td>
<td>36.989</td>
<td>-116.022</td>
<td>1174</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:15:00.08</td>
<td>37.175</td>
<td>-116.093</td>
<td>1357</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:15:00.08</td>
<td>37.175</td>
<td>-116.093</td>
<td>1357</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>20:30:00.06</td>
<td>37.199</td>
<td>-116.210</td>
<td>2232</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>20:06:00.06</td>
<td>37.077</td>
<td>-116.001</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
</tbody>
</table>
# United States Nuclear Tests – By Date

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Cornerstone -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1021 Kawich-Red</td>
<td>02/24/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cu</td>
</tr>
<tr>
<td>Kawich-Black</td>
<td>02/24/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cu</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1022 Ingot</td>
<td>03/09/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gg</td>
</tr>
<tr>
<td>Palisade-1</td>
<td>05/15/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
</tr>
<tr>
<td>Palisade-2</td>
<td>05/15/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
</tr>
<tr>
<td>Palisade-3</td>
<td>05/15/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1024 Tulia</td>
<td>05/26/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U4s</td>
</tr>
<tr>
<td>1025 Contact</td>
<td>06/22/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aw</td>
</tr>
<tr>
<td>1026 Amarillo</td>
<td>06/27/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ay</td>
</tr>
<tr>
<td>1027 Disko Elm</td>
<td>09/14/1989</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12p.03</td>
</tr>
<tr>
<td><strong>Operation Aqueduct</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1028 Hornitos</td>
<td>10/31/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bc</td>
</tr>
<tr>
<td>1029 Muleshoe</td>
<td>11/15/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bk</td>
</tr>
<tr>
<td>1030 Barnwell</td>
<td>12/08/1989</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20az</td>
</tr>
<tr>
<td>1031 Whiteface-A</td>
<td>12/20/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lp</td>
</tr>
<tr>
<td>Whiteface-B</td>
<td>12/20/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lp</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1032 Metropolis</td>
<td>03/10/1990</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gh</td>
</tr>
<tr>
<td>1033 Bowie</td>
<td>04/06/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mk</td>
</tr>
<tr>
<td>1034 <strong>Bullion</strong></td>
<td>06/13/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U20bd</td>
</tr>
<tr>
<td>1035 Austin</td>
<td>06/21/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U6e</td>
</tr>
<tr>
<td>1036 Mineral Quarry</td>
<td>07/25/1990</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.22</td>
</tr>
<tr>
<td>Randsburg</td>
<td>07/25/1990</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.22a</td>
</tr>
<tr>
<td>Simultaneous, separate drifts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1037 Sundown-A</td>
<td>09/20/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1d</td>
</tr>
<tr>
<td>Sundown-B</td>
<td>09/20/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1d</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1038 Ledoux</td>
<td>09/27/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1a.01</td>
</tr>
<tr>
<td><strong>Operation Sculpin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1039 <strong>Tenabo</strong></td>
<td>10/12/1990</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bb</td>
</tr>
<tr>
<td>1040 Houston</td>
<td>11/14/1990</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U19az</td>
</tr>
<tr>
<td>1041 Coso-Bronze</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
</tr>
<tr>
<td>Coso-Gray</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
</tr>
<tr>
<td>Coso-Silver</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1042 Bexar</td>
<td>04/04/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ba</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>16:15:00.08</td>
<td>37.128</td>
<td>-116.123</td>
<td>1352</td>
<td>Shaft</td>
</tr>
<tr>
<td>14:05:00.09</td>
<td>37.143</td>
<td>-116.068</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>13:10:00.09</td>
<td>37.108</td>
<td>-116.122</td>
<td>1338</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:07:00.02</td>
<td>37.086</td>
<td>-116.056</td>
<td>1230</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:15:00.08</td>
<td>37.283</td>
<td>-116.413</td>
<td>1980</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:30:00.02</td>
<td>37.275</td>
<td>-116.354</td>
<td>2019</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.10</td>
<td>37.236</td>
<td>-116.164</td>
<td>1917</td>
<td>Tunnel</td>
</tr>
<tr>
<td>15:30:00.09</td>
<td>37.263</td>
<td>-116.492</td>
<td>1846</td>
<td>Shaft</td>
</tr>
<tr>
<td>20:20:00.12</td>
<td>37.106</td>
<td>-116.014</td>
<td>1311</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:00:00.04</td>
<td>37.068</td>
<td>-115.993</td>
<td>1271</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.09</td>
<td>37.262</td>
<td>-116.421</td>
<td>1950</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:15:00.00</td>
<td>36.993</td>
<td>-116.005</td>
<td>1174</td>
<td>Shaft</td>
</tr>
<tr>
<td>15:00:00.06</td>
<td>37.207</td>
<td>-116.215</td>
<td>2216</td>
<td>Tunnel</td>
</tr>
<tr>
<td>16:15:00.00</td>
<td>37.038</td>
<td>-116.058</td>
<td>1206</td>
<td>Shaft</td>
</tr>
<tr>
<td>18:02:46.00</td>
<td>37.008</td>
<td>-116.059</td>
<td>1191</td>
<td>Shaft</td>
</tr>
<tr>
<td>17:30:00.08</td>
<td>37.248</td>
<td>-116.495</td>
<td>1871</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:17:00.07</td>
<td>37.227</td>
<td>-116.372</td>
<td>2031</td>
<td>Shaft</td>
</tr>
<tr>
<td>21:02:45.08</td>
<td>37.104</td>
<td>-116.075</td>
<td>1254</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.00</td>
<td>37.296</td>
<td>-116.314</td>
<td>2118</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Operation Aqueduct**

**Operation Sculpin**
<table>
<thead>
<tr>
<th>Test</th>
<th>Date (mm/dd/yyyy)(GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Sculpin -- Continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1043 Montello</td>
<td>04/16/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bf</td>
</tr>
<tr>
<td>1044 Floydada</td>
<td>08/15/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U7cb</td>
</tr>
<tr>
<td>1045 Hoya</td>
<td>09/14/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20be</td>
</tr>
<tr>
<td>1046 Distant Zenith</td>
<td>09/19/1991</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12p.04</td>
</tr>
<tr>
<td><strong>Operation Julin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1047 Lubbock</td>
<td>10/18/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mt</td>
</tr>
<tr>
<td>1048 Bristol</td>
<td>11/26/1991</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U4av</td>
</tr>
<tr>
<td>1049 Junction</td>
<td>03/26/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U19bg</td>
</tr>
<tr>
<td>1050 Diamond Fortune</td>
<td>04/30/1992</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12p.05</td>
</tr>
<tr>
<td>1051 Victoria</td>
<td>06/19/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kv</td>
</tr>
<tr>
<td>1052 Galena-Yellow, Galena-Orange, Galena-Green</td>
<td>06/23/1992</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cv</td>
</tr>
<tr>
<td>Simultaneous, same hole</td>
<td></td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cv</td>
</tr>
<tr>
<td>1053 Hunters Trophy</td>
<td>Test to ensure reliability of U.S. deterrent forces</td>
<td>09/18/1992</td>
<td>LLNL/DoD</td>
<td>NTS</td>
</tr>
<tr>
<td>1054 Divider</td>
<td>09/23/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ml</td>
</tr>
<tr>
<td>Time (GMT)</td>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>15:30:00.07</td>
<td>37.245</td>
<td>-116.443</td>
<td>1961</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:00:00.00</td>
<td>37.087</td>
<td>-116.003</td>
<td>1280</td>
<td>Shaft</td>
</tr>
<tr>
<td>19:00:00.08</td>
<td>37.226</td>
<td>-116.429</td>
<td>1951</td>
<td>Shaft</td>
</tr>
<tr>
<td>16:30:00.07</td>
<td>37.236</td>
<td>-116.167</td>
<td>1921</td>
<td>Tunnel</td>
</tr>
</tbody>
</table>

**Operation Sculpin -- Continued**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>19:12:00.00</td>
<td>37.063</td>
<td>-116.046</td>
<td>1213</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>18:35:00.07</td>
<td>37.096</td>
<td>-116.070</td>
<td>1246</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:30:00.00</td>
<td>37.272</td>
<td>-116.361</td>
<td>2013</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>16:30:00.00</td>
<td>37.234</td>
<td>-116.158</td>
<td>1656</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>16:45:00.00</td>
<td>37.005</td>
<td>-116.011</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.124</td>
<td>-116.032</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.124</td>
<td>-116.032</td>
<td>1269</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:00:00.07</td>
<td>37.124</td>
<td>-116.032</td>
<td>1269</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>17:00:00.08</td>
<td>37.207</td>
<td>-116.211</td>
<td>1827</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>15:04:00.00</td>
<td>37.021</td>
<td>-115.989</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

**Operation Julin**

<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:04:00.00</td>
<td>37.021</td>
<td>-115.989</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
</tbody>
</table>

89
This page intentionally left blank.
United States Nuclear Detonations --
By Name
# United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aardvark</td>
<td>05/12/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3am(s)</td>
<td>19:00:00.10</td>
</tr>
<tr>
<td>Abeytas</td>
<td>11/05/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gx</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Abilene</td>
<td>04/07/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mn</td>
<td>17:15:00.08</td>
</tr>
<tr>
<td>Able</td>
<td>06/30/1946</td>
<td>LANL/DoD</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Able</td>
<td>01/27/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Able</td>
<td>10/22/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Able</td>
<td>04/01/1952</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Abo</td>
<td>10/30/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mc</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Absinthe</td>
<td>05/26/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ep</td>
<td>12:30:00.03</td>
</tr>
<tr>
<td>Ace</td>
<td>06/11/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2n</td>
<td>16:45:00.15</td>
</tr>
<tr>
<td>Acushi</td>
<td>02/08/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bg</td>
<td>18:30:00.14</td>
</tr>
<tr>
<td>Adobe</td>
<td>04/25/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Adze</td>
<td>05/28/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fw</td>
<td>14:45:00.04</td>
</tr>
<tr>
<td>Agile</td>
<td>02/23/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2v</td>
<td>18:50:00.13</td>
</tr>
<tr>
<td>Agouti</td>
<td>01/18/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ao</td>
<td>18:00:00.13</td>
</tr>
<tr>
<td>Agrini</td>
<td>03/31/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ev</td>
<td>14:30:00.08</td>
</tr>
<tr>
<td>Ahtanum</td>
<td>09/13/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2l</td>
<td>13:53:00.15</td>
</tr>
<tr>
<td>Ajax</td>
<td>11/11/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9al</td>
<td>12:00:00.14</td>
</tr>
<tr>
<td>Ajo</td>
<td>01/30/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gd</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Akavi</td>
<td>12/03/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2es</td>
<td>15:00:00.10</td>
</tr>
<tr>
<td>Akbar</td>
<td>11/09/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ax</td>
<td>15:15:00.16</td>
</tr>
<tr>
<td>Alamo</td>
<td>07/07/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U19au</td>
<td>15:05:30.07</td>
</tr>
<tr>
<td>Alemán</td>
<td>09/11/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kz</td>
<td>14:57:00.11</td>
</tr>
<tr>
<td>Algodones</td>
<td>08/18/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jn</td>
<td>14:00:00.03</td>
</tr>
<tr>
<td>Aligote</td>
<td>05/29/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bg</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Aliment</td>
<td>05/15/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gj</td>
<td>18:00:00.04</td>
</tr>
<tr>
<td>Allegheny</td>
<td>09/29/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9x</td>
<td>17:00:00.15</td>
</tr>
<tr>
<td>Alma</td>
<td>06/08/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Almendro</td>
<td>06/06/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U19v</td>
<td>13:00:00.08</td>
</tr>
<tr>
<td>Alpaca</td>
<td>02/12/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2a</td>
<td>15:10:29.49</td>
</tr>
<tr>
<td>Alumroot</td>
<td>02/14/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cj</td>
<td>15:30:00.16</td>
</tr>
<tr>
<td>Alva</td>
<td>08/19/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2j</td>
<td>16:00:00.14</td>
</tr>
<tr>
<td>Alviso</td>
<td>06/11/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2du</td>
<td>13:00:00.17</td>
</tr>
<tr>
<td>Amarillo</td>
<td>06/27/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ay</td>
<td>15:30:00.02</td>
</tr>
<tr>
<td>Anacostia</td>
<td>11/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9i</td>
<td>18:00:00.14</td>
</tr>
<tr>
<td>Anchovy</td>
<td>11/14/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bg</td>
<td>16:00:00.12</td>
</tr>
<tr>
<td>Androscegin</td>
<td>10/02/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Angus</td>
<td>04/25/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jg</td>
<td>22:25:00.03</td>
</tr>
<tr>
<td>Annie</td>
<td>03/17/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>37.065</td>
<td>-116.031</td>
<td>1214</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>40 kt</td>
</tr>
<tr>
<td>37.029</td>
<td>-116.013</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.045</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>21 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>1 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>Less than 0.1 kt</td>
</tr>
<tr>
<td>37.063</td>
<td>-116.037</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.045</td>
<td>-116.020</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.149</td>
<td>-116.077</td>
<td>1300</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.022</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>190 kt</td>
</tr>
<tr>
<td>37.009</td>
<td>-115.996</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.067</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.035</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>6.4 kt</td>
</tr>
<tr>
<td>37.146</td>
<td>-116.085</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.163</td>
<td>-116.082</td>
<td>1320</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.051</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.031</td>
<td>-116.036</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.148</td>
<td>-116.072</td>
<td>1293</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.034</td>
<td>1295</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.252</td>
<td>-116.378</td>
<td>1964</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.069</td>
<td>-116.051</td>
<td>1218</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.057</td>
<td>-116.037</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.102</td>
<td>-116.005</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-115.986</td>
<td>1207</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.034</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>782 kt</td>
</tr>
<tr>
<td>37.245</td>
<td>-116.347</td>
<td>2069</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>37.164</td>
<td>-116.077</td>
<td>1315</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>330 tons</td>
</tr>
<tr>
<td>37.147</td>
<td>-116.051</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.159</td>
<td>-116.084</td>
<td>1320</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>4.4 kt</td>
</tr>
<tr>
<td>37.112</td>
<td>-116.075</td>
<td>1261</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.275</td>
<td>-116.354</td>
<td>2019</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.123</td>
<td>-116.030</td>
<td>1274</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>5.2 kt</td>
</tr>
<tr>
<td>37.039</td>
<td>-116.019</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>75 kt</td>
</tr>
<tr>
<td>37.005</td>
<td>-116.029</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>16 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>-----------</td>
<td>-------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Antler</td>
<td>09/15/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.03a</td>
<td>17:00:00.12</td>
</tr>
<tr>
<td>Apache</td>
<td>07/08/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Apodaca</td>
<td>07/21/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gs</td>
<td>13:33:00.05</td>
</tr>
<tr>
<td>Apple-1</td>
<td>03/29/1955</td>
<td>LANL</td>
<td>Area 4</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Apple-2</td>
<td>05/05/1955</td>
<td>LANL</td>
<td>Area 1</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Apshapa</td>
<td>06/06/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ai</td>
<td>16:58:00.15</td>
</tr>
<tr>
<td>Arabis-Blue</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz26</td>
<td>15:00:00.21</td>
</tr>
<tr>
<td>Arabis-Green</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itstx28</td>
<td>15:00:00.21</td>
</tr>
<tr>
<td>Arabis-Red</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsv26</td>
<td>15:00:00.21</td>
</tr>
<tr>
<td>Argus I</td>
<td>08/27/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Argus II</td>
<td>08/30/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Argus III</td>
<td>09/06/1958</td>
<td>LANL/DoD</td>
<td>South Atlantic</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Arikaree</td>
<td>05/10/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9r</td>
<td>15:00:00.16</td>
</tr>
<tr>
<td>Arkansas</td>
<td>05/02/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Armada</td>
<td>04/22/1983</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U9cs</td>
<td>13:53:00.08</td>
</tr>
<tr>
<td>Armadillo</td>
<td>02/09/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ar</td>
<td>16:30:00.13</td>
</tr>
<tr>
<td>Arnica-Violet</td>
<td>06/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd3</td>
<td>13:00:00.04</td>
</tr>
<tr>
<td>Arnica-Yellow</td>
<td>06/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd2</td>
<td>13:00:00.04</td>
</tr>
<tr>
<td>Arsenate</td>
<td>11/09/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ci</td>
<td>18:15:00.16</td>
</tr>
<tr>
<td>Artesia</td>
<td>12/16/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7x</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Asco</td>
<td>04/25/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bc</td>
<td>14:35:00.16</td>
</tr>
<tr>
<td>Asiago</td>
<td>12/21/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ar</td>
<td>15:09:00.17</td>
</tr>
<tr>
<td>Aspen</td>
<td>06/14/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Atarque</td>
<td>07/25/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ht</td>
<td>13:30:00.06</td>
</tr>
<tr>
<td>Atrisco</td>
<td>08/05/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bp</td>
<td>14:00:00.09</td>
</tr>
<tr>
<td>Auger</td>
<td>11/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fx</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Auk</td>
<td>10/02/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U7b</td>
<td>20:03:00.04</td>
</tr>
<tr>
<td>Austin</td>
<td>06/21/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U6e</td>
<td>18:15:00.00</td>
</tr>
<tr>
<td>Avens-Alkermes</td>
<td>12/16/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsu24</td>
<td>16:00:00.17</td>
</tr>
<tr>
<td>Avens-Andorre</td>
<td>12/16/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9its28</td>
<td>16:00:00.17</td>
</tr>
<tr>
<td>Avens-Asamite</td>
<td>12/16/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsw21</td>
<td>16:00:00.17</td>
</tr>
<tr>
<td>Avens-Cream</td>
<td>12/16/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx29</td>
<td>16:00:00.17</td>
</tr>
<tr>
<td>Aztec</td>
<td>04/27/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Azul</td>
<td>12/14/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2em</td>
<td>18:00:00.09</td>
</tr>
<tr>
<td>Baccarat</td>
<td>01/24/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ax</td>
<td>18:00:00.10</td>
</tr>
<tr>
<td>Backbeach</td>
<td>04/11/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U19x</td>
<td>17:45:00.07</td>
</tr>
<tr>
<td>Backgammon</td>
<td>11/29/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jh</td>
<td>15:00:00.10</td>
</tr>
<tr>
<td>Backswing</td>
<td>05/14/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aw</td>
<td>14:40:00.15</td>
</tr>
<tr>
<td>Badger</td>
<td>04/18/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 2</td>
<td>- - -</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.188</td>
<td>-116.209</td>
<td>2254</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>2.6 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>1.85 Mt</td>
</tr>
<tr>
<td>37.014</td>
<td>-115.993</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>14 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>29 kt</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.038</td>
<td>1265</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.142</td>
<td>-116.035</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>1-2 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>1-2 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>1-2 kt</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.049</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.023</td>
<td>1296</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.040</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>7.1 kt</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.085</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.087</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.033</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.100</td>
<td>-116.009</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.036</td>
<td>1285</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.068</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>319 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.016</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.084</td>
<td>-116.007</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>138 kt</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.001</td>
<td>1222</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.078</td>
<td>-116.009</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.993</td>
<td>-116.005</td>
<td>1174</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.039</td>
<td>1262</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.142</td>
<td>-116.040</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.143</td>
<td>-116.035</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>410 kt</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.064</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.105</td>
<td>-116.013</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.233</td>
<td>-116.369</td>
<td>2040</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.994</td>
<td>-116.025</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.040</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>23 kt</td>
</tr>
</tbody>
</table>
# United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker</td>
<td>07/24/1946</td>
<td>LANL/DoD</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Baker</td>
<td>01/28/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Baker</td>
<td>10/28/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Baker</td>
<td>04/15/1952</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Baker-2</td>
<td>02/02/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Baltic</td>
<td>08/06/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itss25</td>
<td>14:31:00.16</td>
</tr>
<tr>
<td>Bandicoot</td>
<td>10/19/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bj</td>
<td>18:00:00.08</td>
</tr>
<tr>
<td>Baneberry</td>
<td>12/18/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8d</td>
<td>15:30:00.20</td>
</tr>
<tr>
<td>Banon</td>
<td>08/26/1976</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2dz</td>
<td>14:30:00.17</td>
</tr>
<tr>
<td>Barbel</td>
<td>10/16/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bx</td>
<td>15:59:30.04</td>
</tr>
<tr>
<td>Barnwell</td>
<td>12/08/1989</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20az</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Barracuda</td>
<td>12/04/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cr</td>
<td>16:38:30.13</td>
</tr>
<tr>
<td>Barranca</td>
<td>08/04/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3he</td>
<td>13:30:00.04</td>
</tr>
<tr>
<td>Barsac</td>
<td>03/20/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gc</td>
<td>18:12:00.04</td>
</tr>
<tr>
<td>Baseball</td>
<td>01/15/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ba</td>
<td>20:25:00.09</td>
</tr>
<tr>
<td>Bay Leaf</td>
<td>12/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gq</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Bee</td>
<td>03/22/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Beebalm</td>
<td>05/01/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fn</td>
<td>14:13:00.04</td>
</tr>
<tr>
<td>Belen</td>
<td>02/04/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3br</td>
<td>17:00:00.07</td>
</tr>
<tr>
<td>Bellow</td>
<td>05/16/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ac</td>
<td>16:00:00.08</td>
</tr>
<tr>
<td>Belmont</td>
<td>10/16/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20as</td>
<td>19:25:00.09</td>
</tr>
<tr>
<td>Benham</td>
<td>12/19/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20c</td>
<td>16:30:00.04</td>
</tr>
<tr>
<td>Bernal</td>
<td>11/28/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jy</td>
<td>15:30:00.08</td>
</tr>
<tr>
<td>Bernalillo</td>
<td>09/17/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3n</td>
<td>19:30:00.00</td>
</tr>
<tr>
<td>Bevel</td>
<td>04/04/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fu</td>
<td>15:02:00.04</td>
</tr>
<tr>
<td>Bexar</td>
<td>04/04/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ba</td>
<td>19:00:00.00</td>
</tr>
<tr>
<td>Biggin</td>
<td>01/30/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bz</td>
<td>15:17:00.12</td>
</tr>
<tr>
<td>Bighorn</td>
<td>06/27/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bilby</td>
<td>09/13/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cn</td>
<td>17:00:00.13</td>
</tr>
<tr>
<td>Bilge</td>
<td>02/19/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kc</td>
<td>20:10:00.22</td>
</tr>
<tr>
<td>Billet</td>
<td>07/27/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7an</td>
<td>20:30:00.08</td>
</tr>
<tr>
<td>Bit-A</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gt</td>
<td>18:30:00.04</td>
</tr>
<tr>
<td>Bit-B</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gt</td>
<td>18:30:00.04</td>
</tr>
<tr>
<td>Bitterling</td>
<td>06/12/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cu</td>
<td>14:01:00.10</td>
</tr>
<tr>
<td>Black</td>
<td>04/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9p</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>06/11/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Blanca</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.05</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Blenton</td>
<td>04/30/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U7p</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Bluegill 3 Prime</td>
<td>10/26/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>July 1945 through September 1992</td>
<td></td>
<td></td>
<td>Underwater Weapons Effects</td>
<td></td>
<td>21 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop Weapons Related</td>
<td></td>
<td>8 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop Weapons Related</td>
<td></td>
<td>3.5 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop Weapons Effects</td>
<td></td>
<td>1 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop Weapons Related</td>
<td></td>
<td>8 kt</td>
</tr>
<tr>
<td>37.138</td>
<td>-116.042</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.039</td>
<td>-116.022</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>12.5 kt</td>
</tr>
<tr>
<td>37.173</td>
<td>-116.100</td>
<td>1367</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10 kt</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.083</td>
<td>1275</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.039</td>
<td>-116.017</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.231</td>
<td>-116.410</td>
<td>2031</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.013</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.020</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.022</td>
<td>-116.031</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.087</td>
<td>-116.046</td>
<td>1232</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>8 kt</td>
</tr>
<tr>
<td>37.059</td>
<td>-116.029</td>
<td>1209</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.055</td>
<td>-116.040</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.092</td>
<td>-116.094</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.220</td>
<td>-116.463</td>
<td>1871</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.231</td>
<td>-116.474</td>
<td>1887</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.15 Mt</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.025</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.034</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>15 tons</td>
</tr>
<tr>
<td>37.052</td>
<td>-116.022</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.296</td>
<td>-116.314</td>
<td>2118</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.133</td>
<td>-116.041</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>7.65 Mt</td>
</tr>
<tr>
<td>37.060</td>
<td>-116.023</td>
<td>1215</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>249 kt</td>
</tr>
<tr>
<td>37.002</td>
<td>-116.025</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.075</td>
<td>-116.045</td>
<td>1222</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.039</td>
<td>-116.013</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.039</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>8 kt</td>
</tr>
<tr>
<td>37.186</td>
<td>-116.203</td>
<td>2145</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>22 kt</td>
</tr>
<tr>
<td>37.081</td>
<td>-116.015</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>Submegaton</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>-------------------------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Bluestone</td>
<td>06/30/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bobac</td>
<td>08/24/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bl</td>
<td>17:00:00.13</td>
</tr>
<tr>
<td>Bobstay</td>
<td>10/26/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jb</td>
<td>14:15:00.08</td>
</tr>
<tr>
<td>Bodie</td>
<td>12/13/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ap</td>
<td>17:50:05.09</td>
</tr>
<tr>
<td>Bogey</td>
<td>04/17/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9au</td>
<td>15:29:52.28</td>
</tr>
<tr>
<td>Boltzmann</td>
<td>05/28/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>-</td>
</tr>
<tr>
<td>Bonarda</td>
<td>09/25/1980</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gv</td>
<td>14:45:00.09</td>
</tr>
<tr>
<td>Bonefish</td>
<td>02/18/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bt</td>
<td>15:37:19.12</td>
</tr>
<tr>
<td>Boomer</td>
<td>10/01/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aa</td>
<td>21:30:00.12</td>
</tr>
<tr>
<td>Borate</td>
<td>10/23/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ge</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Bordeaux</td>
<td>08/18/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dr</td>
<td>20:12:30.04</td>
</tr>
<tr>
<td>Borrego</td>
<td>09/29/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U7br</td>
<td>13:30:00.10</td>
</tr>
<tr>
<td>Bourbon</td>
<td>01/20/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7n</td>
<td>17:40:03.41</td>
</tr>
<tr>
<td>Bouschet</td>
<td>05/07/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3la</td>
<td>18:17:00.11</td>
</tr>
<tr>
<td>Bowie</td>
<td>04/06/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mk</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Bowl-1</td>
<td>06/26/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bo1</td>
<td>16:00:00.13</td>
</tr>
<tr>
<td>Bowl-2</td>
<td>06/26/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bo2</td>
<td>16:00:00.13</td>
</tr>
<tr>
<td>Boxcar</td>
<td>04/26/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20i</td>
<td>15:00:00.07</td>
</tr>
<tr>
<td>Bracken</td>
<td>07/09/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aq</td>
<td>14:00:00.16</td>
</tr>
<tr>
<td>Branco</td>
<td>09/21/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ew</td>
<td>16:25:00.08</td>
</tr>
<tr>
<td>Branco-Herkimer</td>
<td>09/21/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ew</td>
<td>16:25:00.08</td>
</tr>
<tr>
<td>Bravo</td>
<td>02/28/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brazos</td>
<td>03/08/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9d</td>
<td>18:00:00.21</td>
</tr>
<tr>
<td>Breton</td>
<td>09/13/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ar</td>
<td>14:00:00.00</td>
</tr>
<tr>
<td>Brie</td>
<td>06/18/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10cc</td>
<td>15:20:00.08</td>
</tr>
<tr>
<td>Bristol</td>
<td>11/26/1991</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U4av</td>
<td>18:35:00.07</td>
</tr>
<tr>
<td>Bronze</td>
<td>07/23/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U7f</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Brush</td>
<td>01/24/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eq</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Buff</td>
<td>12/16/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dh</td>
<td>19:15:00.04</td>
</tr>
<tr>
<td>Buggy-A</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30a</td>
<td>17:04:00.11</td>
</tr>
<tr>
<td>Buggy-B</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30b</td>
<td>17:04:00.11</td>
</tr>
<tr>
<td>Buggy-C</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30c</td>
<td>17:04:00.11</td>
</tr>
<tr>
<td>Buggy-D</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30d</td>
<td>17:04:00.11</td>
</tr>
<tr>
<td>Buggy-E</td>
<td>03/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U30e</td>
<td>17:04:00.11</td>
</tr>
<tr>
<td>Bulkhead</td>
<td>04/27/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U7am</td>
<td>15:00:00.08</td>
</tr>
<tr>
<td>Bullfrog</td>
<td>08/30/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4au</td>
<td>18:00:00.09</td>
</tr>
<tr>
<td>Bullion</td>
<td>06/13/1990</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bd</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Bumping</td>
<td>10/06/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bunker</td>
<td>02/13/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bb</td>
<td>15:30:00.15</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>---------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.025</td>
<td>1199</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>1.27 Mt</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.018</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.263</td>
<td>-116.413</td>
<td>1991</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.035</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>12 kt</td>
</tr>
<tr>
<td>37.056</td>
<td>-116.049</td>
<td>1209</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.059</td>
<td>-116.034</td>
<td>1207</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.035</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.142</td>
<td>-116.080</td>
<td>1294</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.037</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.091</td>
<td>-116.046</td>
<td>1234</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.100</td>
<td>-116.005</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.069</td>
<td>-116.046</td>
<td>1217</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.068</td>
<td>-115.993</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.079</td>
<td>1316</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.161</td>
<td>-116.080</td>
<td>1315</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.295</td>
<td>-116.457</td>
<td>1914</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.3 Mt</td>
</tr>
<tr>
<td>37.164</td>
<td>-116.034</td>
<td>1297</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>15 Mt</td>
</tr>
<tr>
<td>37.122</td>
<td>-116.050</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>8.4 kt</td>
</tr>
<tr>
<td>37.087</td>
<td>-116.072</td>
<td>1238</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.194</td>
<td>-116.036</td>
<td>1318</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.096</td>
<td>-116.070</td>
<td>1246</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Joint US-UK</td>
</tr>
<tr>
<td>37.098</td>
<td>-116.034</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.043</td>
<td>-116.015</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.073</td>
<td>-116.030</td>
<td>1223</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.371</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.371</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.372</td>
<td>1561</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.372</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.373</td>
<td>1560</td>
<td>Crater</td>
<td>Plowshare</td>
<td>1.08 kt</td>
</tr>
<tr>
<td>37.095</td>
<td>-116.029</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.086</td>
<td>-116.069</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.262</td>
<td>-116.421</td>
<td>1950</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.132</td>
<td>-116.033</td>
<td>1270</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>11.3 kt</td>
</tr>
</tbody>
</table>

July 1945 through September 1992
## United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burzet</td>
<td>08/03/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ai</td>
<td>15:07:30.16</td>
</tr>
<tr>
<td>Buteo</td>
<td>05/12/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U20a</td>
<td>18:15:00.10</td>
</tr>
<tr>
<td>Butternut</td>
<td>05/11/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Bye</td>
<td>07/16/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10i</td>
<td>13:15:00.15</td>
</tr>
<tr>
<td>Caboc</td>
<td>12/16/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cp</td>
<td>21:05:00.09</td>
</tr>
<tr>
<td>Cabra</td>
<td>03/26/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aj</td>
<td>20:20:00.09</td>
</tr>
<tr>
<td>Cabresto</td>
<td>05/24/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U7h</td>
<td>13:30:00.04</td>
</tr>
<tr>
<td>Cabrillo</td>
<td>03/07/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dr</td>
<td>16:00:00.17</td>
</tr>
<tr>
<td>Cabriolet</td>
<td>01/26/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20l</td>
<td>16:00:00.11</td>
</tr>
<tr>
<td>Cactus</td>
<td>05/05/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Calamity</td>
<td>10/27/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Cambric</td>
<td>05/14/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U5e</td>
<td>14:57:52.15</td>
</tr>
<tr>
<td>Camembert</td>
<td>06/26/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19q</td>
<td>12:30:00.16</td>
</tr>
<tr>
<td>Camphor</td>
<td>06/29/1971</td>
<td>LLNL/SNL/DoD</td>
<td>NTS</td>
<td>U12g.10</td>
<td>18:30:00.16</td>
</tr>
<tr>
<td>Campos</td>
<td>02/13/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cp</td>
<td>21:53:00.16</td>
</tr>
<tr>
<td>Can-Green</td>
<td>04/21/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd1</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Can-Red</td>
<td>04/21/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dd4</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Canfield</td>
<td>05/02/1980</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kx</td>
<td>18:46:30.09</td>
</tr>
<tr>
<td>Canjilon</td>
<td>12/16/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fq</td>
<td>16:00:00.05</td>
</tr>
<tr>
<td>Canna-Limoges</td>
<td>11/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsyz26</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Canna-Umbrinus</td>
<td>11/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsyz26</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Cannikin</td>
<td>11/06/1971</td>
<td>LLNL</td>
<td>Amchitka, Alaska</td>
<td>- - -</td>
<td>22:00:00.06</td>
</tr>
<tr>
<td>Canvasback</td>
<td>08/22/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cp</td>
<td>22:17:00.06</td>
</tr>
<tr>
<td>Capitan</td>
<td>06/28/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jj</td>
<td>14:41:00.19</td>
</tr>
<tr>
<td>Caprock</td>
<td>05/31/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U4q</td>
<td>13:04:00.10</td>
</tr>
<tr>
<td>Carmel</td>
<td>02/21/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2h</td>
<td>19:47:08.63</td>
</tr>
<tr>
<td>Carnelian</td>
<td>07/28/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4af</td>
<td>14:07:00.16</td>
</tr>
<tr>
<td>Carp</td>
<td>09/27/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cb</td>
<td>14:20:00.13</td>
</tr>
<tr>
<td>Carpetbag</td>
<td>12/17/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dg</td>
<td>16:05:00.16</td>
</tr>
<tr>
<td>Carrizozo</td>
<td>12/03/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hr</td>
<td>15:07:00.00</td>
</tr>
<tr>
<td>Cashmere</td>
<td>02/04/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ad</td>
<td>15:30:00.11</td>
</tr>
<tr>
<td>Casselman</td>
<td>02/08/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10g</td>
<td>16:00:00.16</td>
</tr>
<tr>
<td>Cassowary</td>
<td>12/16/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bn</td>
<td>20:00:00.07</td>
</tr>
<tr>
<td>Cathay</td>
<td>10/08/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ch</td>
<td>14:30:00.15</td>
</tr>
<tr>
<td>Catron</td>
<td>10/24/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
</tr>
<tr>
<td>Cebbrero</td>
<td>08/14/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cw</td>
<td>13:00:00.08</td>
</tr>
<tr>
<td>Cedar</td>
<td>07/02/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.084</td>
<td>-116.071</td>
<td>1235</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Burzet</td>
</tr>
<tr>
<td>37.243</td>
<td>-116.432</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Buteo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>81 kt</td>
<td>Butternut</td>
</tr>
<tr>
<td>37.182</td>
<td>-116.046</td>
<td>1295</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Bye</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.124</td>
<td>1348</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Caboc</td>
</tr>
<tr>
<td>37.301</td>
<td>-116.461</td>
<td>1907</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Cabra</td>
</tr>
<tr>
<td>37.078</td>
<td>-116.032</td>
<td>1228</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cabresto</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.085</td>
<td>1288</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Cabrillo</td>
</tr>
<tr>
<td>37.281</td>
<td>-116.515</td>
<td>1862</td>
<td>Crater</td>
<td>Plowshare</td>
<td>2.3 kt</td>
<td>Cabriquet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>18 kt</td>
<td>Cactus</td>
</tr>
<tr>
<td>37.143</td>
<td>-116.065</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>110 kt</td>
<td>Calabash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>800 kt</td>
<td>Calamity</td>
</tr>
<tr>
<td>36.823</td>
<td>-115.968</td>
<td>929</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>750 tons</td>
<td>Cambric</td>
</tr>
<tr>
<td>37.279</td>
<td>-116.369</td>
<td>2033</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Camember</td>
</tr>
<tr>
<td>37.177</td>
<td>-116.212</td>
<td>2289</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Camphor</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.033</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Campos</td>
</tr>
<tr>
<td>37.112</td>
<td>-116.083</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Can-Green</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.081</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Can-Red</td>
</tr>
<tr>
<td>37.056</td>
<td>-116.020</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Canfield</td>
</tr>
<tr>
<td>37.072</td>
<td>-116.026</td>
<td>1227</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Canjilon</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Canna-Limoges</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Canna-Umbrinus</td>
</tr>
<tr>
<td>51.456</td>
<td>179.102</td>
<td>63</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 5 Mt</td>
<td>Cannikin</td>
</tr>
<tr>
<td>37.065</td>
<td>-116.016</td>
<td>1226</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Canvasback</td>
</tr>
<tr>
<td>36.993</td>
<td>-116.023</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Capitan</td>
</tr>
<tr>
<td>37.103</td>
<td>-116.049</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Caprock</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.081</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Carmel</td>
</tr>
<tr>
<td>37.098</td>
<td>-116.092</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Carnelian</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.017</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Carp</td>
</tr>
<tr>
<td>37.129</td>
<td>-116.084</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>220 kt</td>
<td>Carpetbag</td>
</tr>
<tr>
<td>37.006</td>
<td>-116.041</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Carrizoza</td>
</tr>
<tr>
<td>37.131</td>
<td>-116.062</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cashmere</td>
</tr>
<tr>
<td>37.149</td>
<td>-116.053</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Casselman</td>
</tr>
<tr>
<td>37.040</td>
<td>-116.025</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cassowary</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.038</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cathay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Safety Experiment</td>
<td>21 tons</td>
<td>Catron</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.020</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cebolla</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.015</td>
<td>1316</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cebbero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>220 kt</td>
<td>Cedar</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Centaur</td>
<td>08/27/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ak</td>
<td>13:51:13.11</td>
<td></td>
</tr>
<tr>
<td>Ceres</td>
<td>10/26/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerise</td>
<td>11/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eu</td>
<td>15:02:00.04</td>
<td></td>
</tr>
<tr>
<td>Cernada</td>
<td>09/24/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kk</td>
<td>15:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Cerro</td>
<td>09/02/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lf</td>
<td>14:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Chaenactis</td>
<td>12/14/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dl</td>
<td>21:09:59.16</td>
<td></td>
</tr>
<tr>
<td>Chama</td>
<td>10/18/1962</td>
<td>LANL</td>
<td>Johnston Island area</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chamita</td>
<td>08/17/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lz</td>
<td>16:25:00.09</td>
<td></td>
</tr>
<tr>
<td>Chancellor</td>
<td>09/01/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ad</td>
<td>14:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Chantilly</td>
<td>09/29/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2di</td>
<td>14:30:00.14</td>
<td></td>
</tr>
<tr>
<td>Charcoal</td>
<td>09/10/1965</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7g</td>
<td>17:12:00.03</td>
<td></td>
</tr>
<tr>
<td>Charleston</td>
<td>09/28/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlie</td>
<td>10/30/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlie</td>
<td>04/22/1952</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chartreuse</td>
<td>05/06/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U19d</td>
<td>15:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Chateaugay</td>
<td>06/28/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20t</td>
<td>12:22:00.08</td>
<td></td>
</tr>
<tr>
<td>Chatty</td>
<td>03/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bn</td>
<td>14:40:00.43</td>
<td></td>
</tr>
<tr>
<td>Chaves (Chavez)</td>
<td>10/27/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checkmate</td>
<td>10/20/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheedam</td>
<td>02/17/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2et</td>
<td>17:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Chena</td>
<td>10/10/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.09</td>
<td>18:00:00.13</td>
<td></td>
</tr>
<tr>
<td>Chenille</td>
<td>04/22/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bg</td>
<td>13:39:00.10</td>
<td></td>
</tr>
<tr>
<td>Cherokee</td>
<td>05/20/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheshire</td>
<td>02/14/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20n</td>
<td>11:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Chess</td>
<td>06/20/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U7at</td>
<td>15:00:13.54</td>
<td></td>
</tr>
<tr>
<td>Chetco</td>
<td>05/19/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevre</td>
<td>11/23/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ay</td>
<td>15:15:00.16</td>
<td></td>
</tr>
<tr>
<td>Chiberta</td>
<td>12/20/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ek</td>
<td>20:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Chinchilla</td>
<td>02/19/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ag</td>
<td>16:30:00.13</td>
<td></td>
</tr>
<tr>
<td>Chinchilla II</td>
<td>03/31/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3as</td>
<td>18:00:00.13</td>
<td></td>
</tr>
<tr>
<td>Chipmunk</td>
<td>02/15/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ay</td>
<td>17:00:00.13</td>
<td></td>
</tr>
<tr>
<td>Chocolate</td>
<td>04/21/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3es</td>
<td>15:09:00.04</td>
<td></td>
</tr>
<tr>
<td>Cimarron</td>
<td>02/23/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9h</td>
<td>18:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Cinnamon</td>
<td>03/07/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dm</td>
<td>18:41:00.04</td>
<td></td>
</tr>
<tr>
<td>Ciliette</td>
<td>02/05/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kr</td>
<td>18:00:00.12</td>
<td></td>
</tr>
<tr>
<td>Clarksmobile</td>
<td>05/17/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2as</td>
<td>13:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Clean Slate I</td>
<td>05/25/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Slate II</td>
<td>05/31/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Slate III</td>
<td>06/09/1963</td>
<td>LANL/DoD/UK</td>
<td>NAFR</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.137</td>
<td>-116.071</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Centaur</td>
</tr>
<tr>
<td>Tower</td>
<td>Safety Experiment</td>
<td>0.7 tons</td>
<td></td>
<td></td>
<td></td>
<td>Ceres</td>
</tr>
<tr>
<td>37.043</td>
<td>-116.011</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cerise</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.025</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cernada</td>
</tr>
<tr>
<td>37.020</td>
<td>-116.017</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cerro</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.090</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Chaenactis</td>
</tr>
<tr>
<td>Airdrop</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>1.59 Mt</td>
<td>Chama</td>
</tr>
<tr>
<td>37.002</td>
<td>-116.044</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chamita</td>
</tr>
<tr>
<td>37.273</td>
<td>-116.356</td>
<td>2013</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>143 kt</td>
<td>Chancellor</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.088</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chantilly</td>
</tr>
<tr>
<td>37.078</td>
<td>-116.018</td>
<td>1245</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 200 kt</td>
<td>Charcoal</td>
</tr>
<tr>
<td>Balloon</td>
<td>Weapons Related</td>
<td>12 kt</td>
<td></td>
<td></td>
<td></td>
<td>Charleston</td>
</tr>
<tr>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>14 kt</td>
<td></td>
<td></td>
<td></td>
<td>Charlie</td>
</tr>
<tr>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>31 kt</td>
<td></td>
<td></td>
<td></td>
<td>Charlie</td>
</tr>
<tr>
<td>37.348</td>
<td>-116.323</td>
<td>2064</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>73 kt</td>
<td>Chartreuse</td>
</tr>
<tr>
<td>37.245</td>
<td>-116.484</td>
<td>1876</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Chateaugay</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.077</td>
<td>1312</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chatty</td>
</tr>
<tr>
<td>Tower</td>
<td>Safety Experiment</td>
<td>0.6 tons</td>
<td></td>
<td></td>
<td></td>
<td>Chaves (Chavez)</td>
</tr>
<tr>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td>Checkmate</td>
</tr>
<tr>
<td>37.163</td>
<td>-116.064</td>
<td>1293</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cheedam</td>
</tr>
<tr>
<td>37.194</td>
<td>-116.208</td>
<td>2250</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Chena</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.031</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chenille</td>
</tr>
<tr>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>3.8 Mt</td>
<td></td>
<td></td>
<td></td>
<td>Cherokee</td>
</tr>
<tr>
<td>37.243</td>
<td>-116.421</td>
<td>1947</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 500 kt</td>
<td>Cheshire</td>
</tr>
<tr>
<td>37.108</td>
<td>-116.016</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chess</td>
</tr>
<tr>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>73 kt</td>
<td></td>
<td></td>
<td></td>
<td>Chetco</td>
</tr>
<tr>
<td>37.172</td>
<td>-116.054</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chevre</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.062</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Chiberta</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.030</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.9 kt</td>
<td>Chinchilla</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.038</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Chinchilla II</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.033</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
<td>Chipmunk</td>
</tr>
<tr>
<td>37.019</td>
<td>-116.038</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Chocolate</td>
</tr>
<tr>
<td>37.129</td>
<td>-116.049</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>11.9 kt</td>
<td>Cimarron</td>
</tr>
<tr>
<td>37.035</td>
<td>-116.032</td>
<td>1192</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Cinnamon</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.033</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Clairette</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.060</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Clarksmobile</td>
</tr>
<tr>
<td>Surface</td>
<td>Storage-Transportation</td>
<td>Zero</td>
<td></td>
<td>Clean Slate I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.154</td>
<td>-116.077</td>
<td>1306</td>
<td>Surface</td>
<td>Storage-Transportation</td>
<td>Zero</td>
<td>Clean Slate II</td>
</tr>
<tr>
<td>Surface</td>
<td>Storage-Transportation</td>
<td>Zero</td>
<td></td>
<td>Clean Slate III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detonation</td>
<td>Date</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Clearwater</td>
<td>10/16/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12q</td>
<td>17:00:00.14</td>
<td></td>
</tr>
<tr>
<td>Climax</td>
<td>06/04/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Club</td>
<td>01/30/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2aa</td>
<td>16:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Clymer</td>
<td>03/12/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ce</td>
<td>18:04:13.11</td>
<td></td>
</tr>
<tr>
<td>Coalora</td>
<td>02/11/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lo</td>
<td>16:00:00.10</td>
<td></td>
</tr>
<tr>
<td>Cobbler</td>
<td>11/08/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7u</td>
<td>15:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Codsway</td>
<td>02/19/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9g</td>
<td>17:50:00.16</td>
<td></td>
</tr>
<tr>
<td>Coffin</td>
<td>03/21/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2de</td>
<td>14:30:00.41</td>
<td></td>
</tr>
<tr>
<td>Cognac</td>
<td>10/25/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fm</td>
<td>14:30:00.14</td>
<td></td>
</tr>
<tr>
<td>Colby</td>
<td>03/14/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aa</td>
<td>12:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Colfax</td>
<td>10/05/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3k</td>
<td>16:15:00.00</td>
<td></td>
</tr>
<tr>
<td>Colmar</td>
<td>04/26/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hv</td>
<td>15:15:00.04</td>
<td></td>
</tr>
<tr>
<td>Colwick</td>
<td>04/26/1980</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20ac</td>
<td>17:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Commodore</td>
<td>05/20/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2am</td>
<td>15:00:00.20</td>
<td></td>
</tr>
<tr>
<td>Comstock</td>
<td>06/02/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ay</td>
<td>13:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Concentration</td>
<td>12/01/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kn</td>
<td>17:07:30.07</td>
<td></td>
</tr>
<tr>
<td>Contact</td>
<td>06/22/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20aw</td>
<td>21:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Corazon</td>
<td>12/03/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ha</td>
<td>15:07:00.04</td>
<td></td>
</tr>
<tr>
<td>Corduroy</td>
<td>12/03/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10k</td>
<td>15:13:02.10</td>
<td></td>
</tr>
<tr>
<td>Cormorant</td>
<td>07/17/1964</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3df</td>
<td>17:18:30.03</td>
<td></td>
</tr>
<tr>
<td>Cornice-Green</td>
<td>05/15/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ap3</td>
<td>13:30:00.17</td>
<td></td>
</tr>
<tr>
<td>Cornice-Yellow</td>
<td>05/15/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ap1</td>
<td>13:30:00.17</td>
<td></td>
</tr>
<tr>
<td>Cornucopia</td>
<td>07/24/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ga(s)</td>
<td>15:05:00.09</td>
<td></td>
</tr>
<tr>
<td>Correo</td>
<td>08/02/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lw</td>
<td>15:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Coso-Bronze</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
<td>21:02:45.08</td>
<td></td>
</tr>
<tr>
<td>Coso-Gray</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
<td>21:02:45.08</td>
<td></td>
</tr>
<tr>
<td>Coso-Silver</td>
<td>03/08/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4an</td>
<td>21:02:45.08</td>
<td></td>
</tr>
<tr>
<td>Cottage</td>
<td>03/23/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8j</td>
<td>18:30:00.08</td>
<td></td>
</tr>
<tr>
<td>Coulomb-A</td>
<td>07/01/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coulomb-B</td>
<td>09/06/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>S3g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coulomb-C</td>
<td>12/09/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>S3i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coulommiers</td>
<td>09/27/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ei</td>
<td>14:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Courser</td>
<td>09/25/1964</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U3do</td>
<td>17:02:00.03</td>
<td></td>
</tr>
<tr>
<td>Cove</td>
<td>02/16/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ki</td>
<td>17:53:00.16</td>
<td></td>
</tr>
<tr>
<td>Cowles</td>
<td>02/03/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hx</td>
<td>21:45:00.04</td>
<td></td>
</tr>
<tr>
<td>Coyne</td>
<td>04/10/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3af</td>
<td>16:01:30.12</td>
<td></td>
</tr>
<tr>
<td>Cremino</td>
<td>09/27/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8e</td>
<td>16:30:00.17</td>
<td></td>
</tr>
<tr>
<td>Cremino-Calder</td>
<td>09/27/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8e</td>
<td>16:30:00.17</td>
<td></td>
</tr>
<tr>
<td>Crepe</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2q</td>
<td>21:15:00.10</td>
<td></td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.198</td>
<td>-116.230</td>
<td>2233</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate</td>
<td>Clearwater</td>
</tr>
<tr>
<td>37.136</td>
<td>-116.072</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>61 kt</td>
<td>Climax</td>
</tr>
<tr>
<td>37.144</td>
<td>-116.053</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Club</td>
</tr>
<tr>
<td>37.056</td>
<td>-116.046</td>
<td>1210</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Clymer</td>
</tr>
<tr>
<td>37.092</td>
<td>-116.037</td>
<td>1242</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Coalora</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.038</td>
<td>1258</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Codsaw</td>
</tr>
<tr>
<td>37.133</td>
<td>-116.088</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 100 kt</td>
<td>Coffer</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.040</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cognac</td>
</tr>
<tr>
<td>37.306</td>
<td>-116.472</td>
<td>1904</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>500 to 1000 kt</td>
<td>Colby</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>5.5 tons</td>
<td>Colfax</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.021</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Colmor</td>
</tr>
<tr>
<td>37.248</td>
<td>-116.423</td>
<td>1946</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Colwick</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.065</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>250 kt</td>
<td>Commodore</td>
</tr>
<tr>
<td>37.260</td>
<td>-116.442</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
<td>Comstock</td>
</tr>
<tr>
<td>37.030</td>
<td>-116.025</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Concentration</td>
</tr>
<tr>
<td>37.283</td>
<td>-116.413</td>
<td>1980</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Contact</td>
</tr>
<tr>
<td>37.002</td>
<td>-116.039</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Corazon</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.053</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Corduroy</td>
</tr>
<tr>
<td>37.018</td>
<td>-116.030</td>
<td>1184</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Less than 20 kt</td>
<td>Cormorant</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.040</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Cornice-Green</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.036</td>
<td>1293</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Cornice-Yellow</td>
</tr>
<tr>
<td>37.143</td>
<td>-116.072</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cornucopia</td>
</tr>
<tr>
<td>37.017</td>
<td>-116.009</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Correo</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.075</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Coso-Bronze</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.075</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Coso-Gray</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.075</td>
<td>1254</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Coso-Silver</td>
</tr>
<tr>
<td>37.180</td>
<td>-116.090</td>
<td>1362</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Cottage</td>
</tr>
<tr>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Safety Experiment</td>
<td>300 tons</td>
<td>Coulomb-B</td>
</tr>
<tr>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>500 tons</td>
<td>Safety Experiment</td>
<td>Coulomb-C</td>
<td></td>
</tr>
<tr>
<td>37.151</td>
<td>-116.068</td>
<td>1292</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Coulommiers</td>
</tr>
<tr>
<td>37.072</td>
<td>-116.016</td>
<td>1237</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Zero</td>
<td>Courser</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.032</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cove</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.020</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cowles</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.031</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
<td>Coypu</td>
</tr>
<tr>
<td>37.171</td>
<td>-116.088</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cremino</td>
</tr>
<tr>
<td>37.171</td>
<td>-116.088</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Cremino-Caerphilly</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.054</td>
<td>1252</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Crepe</td>
</tr>
</tbody>
</table>
# United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crestlake-Briar</td>
<td>07/18/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dw</td>
<td>14:00:1.20</td>
</tr>
<tr>
<td>Crestlake-Tansan</td>
<td>07/18/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dw</td>
<td>14:00:1.20</td>
</tr>
<tr>
<td>Crew</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td>15:15:0.99</td>
</tr>
<tr>
<td>Crew-2nd</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td>15:16:0.99</td>
</tr>
<tr>
<td>Crew-3rd</td>
<td>11/04/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2db</td>
<td>15:16:0.99</td>
</tr>
<tr>
<td>Crewline</td>
<td>05/25/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ap</td>
<td>17:00:0.88</td>
</tr>
<tr>
<td>Crock</td>
<td>05/08/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ak</td>
<td>14:10:0.00</td>
</tr>
<tr>
<td>Crowdie</td>
<td>05/05/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fe</td>
<td>15:20:0.08</td>
</tr>
<tr>
<td>Cruet</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cn</td>
<td>19:30:0.04</td>
</tr>
<tr>
<td>Cuchillo</td>
<td>08/09/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jt</td>
<td>13:31:0.40</td>
</tr>
<tr>
<td>Culantro-A</td>
<td>12/10/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hia</td>
<td>15:00:0.04</td>
</tr>
<tr>
<td>Culantro-B</td>
<td>12/10/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hib</td>
<td>15:00:0.04</td>
</tr>
<tr>
<td>Cumarin</td>
<td>02/25/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gz</td>
<td>14:28:3.04</td>
</tr>
<tr>
<td>Cumberland</td>
<td>04/11/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2e</td>
<td>16:03:0.16</td>
</tr>
<tr>
<td>Cup</td>
<td>03/26/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cb</td>
<td>15:34:0.16</td>
</tr>
<tr>
<td>Cyathus</td>
<td>03/06/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8b</td>
<td>14:24:0.94</td>
</tr>
<tr>
<td>Cybar</td>
<td>07/17/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ar</td>
<td>21:00:0.06</td>
</tr>
<tr>
<td>Cyclamen</td>
<td>05/05/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cx</td>
<td>14:00:0.04</td>
</tr>
<tr>
<td>Cypress</td>
<td>02/12/1969</td>
<td>LLNL/SNL/DoD</td>
<td>NTS</td>
<td>U12g.09</td>
<td>16:18:20.88</td>
</tr>
<tr>
<td>Daiquiri</td>
<td>09/23/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7o</td>
<td>18:00:0.04</td>
</tr>
<tr>
<td>Dakota</td>
<td>06/25/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - - -</td>
<td>14:00:0.08</td>
</tr>
<tr>
<td>Dalhart</td>
<td>10/13/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U4u</td>
<td>17:00:0.13</td>
</tr>
<tr>
<td>Daman I</td>
<td>06/21/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3be</td>
<td>17:10:0.09</td>
</tr>
<tr>
<td>Danablu</td>
<td>06/09/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eu</td>
<td>18:15:0.12</td>
</tr>
<tr>
<td>Danny Boy</td>
<td>03/05/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U18a</td>
<td>20:27:45.09</td>
</tr>
<tr>
<td>Darwin</td>
<td>06/25/1986</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20aq</td>
<td>16:50:0.08</td>
</tr>
<tr>
<td>Dauphin</td>
<td>11/14/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cq</td>
<td>18:40:0.16</td>
</tr>
<tr>
<td>De Baca</td>
<td>10/26/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>13:30:0.11</td>
</tr>
<tr>
<td>Dead</td>
<td>04/21/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9k</td>
<td>13:30:0.11</td>
</tr>
<tr>
<td>Deck</td>
<td>11/18/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kd</td>
<td>14:00:0.08</td>
</tr>
<tr>
<td>Delamar</td>
<td>04/18/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20at</td>
<td>17:00:0.09</td>
</tr>
<tr>
<td>Delphinium</td>
<td>09/26/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dp</td>
<td>18:15:0.12</td>
</tr>
<tr>
<td>Derringer</td>
<td>09/12/1966</td>
<td>LANL/SNL/DoD</td>
<td>NTS</td>
<td>U5i</td>
<td>16:50:0.08</td>
</tr>
<tr>
<td>Des Moines</td>
<td>06/13/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12n.01</td>
<td>20:27:45.09</td>
</tr>
<tr>
<td>Dexter</td>
<td>06/23/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hs</td>
<td>16:50:0.08</td>
</tr>
<tr>
<td>Diablo Hawk</td>
<td>09/13/1978</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.10a</td>
<td>15:15:0.16</td>
</tr>
<tr>
<td>Diablo</td>
<td>07/15/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12g.15</td>
<td>16:00:0.09</td>
</tr>
<tr>
<td>Diagonal Line</td>
<td>11/24/1971</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11g</td>
<td>20:15:0.17</td>
</tr>
<tr>
<td>Diamond Ace</td>
<td>09/23/1982</td>
<td>LLNL/LANL/DoD</td>
<td>NTS</td>
<td>U12n.15</td>
<td>16:00:0.09</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>----------------------------</td>
<td>--------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.086</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.086</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.087</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.094</td>
<td>-116.046</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.036</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.146</td>
<td>-116.090</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.129</td>
<td>1372</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>11 kt</td>
</tr>
<tr>
<td>37.004</td>
<td>-116.020</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.004</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.002</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.037</td>
<td>-115.999</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.072</td>
<td>1299</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.148</td>
<td>-116.044</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.173</td>
<td>-116.093</td>
<td>1353</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>8.7 kt</td>
</tr>
<tr>
<td>37.279</td>
<td>-116.356</td>
<td>2017</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>119 kt</td>
</tr>
<tr>
<td>37.051</td>
<td>-116.039</td>
<td>1203</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>12 kt</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.212</td>
<td>2265</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.103</td>
<td>-116.037</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.089</td>
<td>-116.050</td>
<td>1229</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.1 Mt</td>
</tr>
<tr>
<td>37.043</td>
<td>-116.031</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.158</td>
<td>-116.090</td>
<td>1327</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.366</td>
<td>1641</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.265</td>
<td>-116.500</td>
<td>1849</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>430 tons</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.020</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.877</td>
<td>-115.951</td>
<td>1013</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7.8 kt</td>
</tr>
<tr>
<td>37.222</td>
<td>-116.163</td>
<td>1696</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>2.9 kt</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.017</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.209</td>
<td>-116.212</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.032</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>2.2 kt</td>
</tr>
<tr>
<td>37.020</td>
<td>-116.022</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.248</td>
<td>-116.510</td>
<td>1875</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.087</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.877</td>
<td>-115.936</td>
<td>1001</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>15 kt</td>
</tr>
<tr>
<td>37.222</td>
<td>-116.163</td>
<td>1696</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.017</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.209</td>
<td>-116.212</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.212</td>
<td>-116.208</td>
<td>1824</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>17 kt</td>
</tr>
<tr>
<td>36.879</td>
<td>-115.936</td>
<td>1010</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.212</td>
<td>-116.208</td>
<td>1824</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Diamond Beech</td>
<td>10/09/1985</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.19</td>
<td>23:20:00.09</td>
</tr>
<tr>
<td>Diamond Dust</td>
<td>05/12/1970</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.05</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Diamond Fortune</td>
<td>04/30/1992</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12p.05</td>
<td>16:30:00.00</td>
</tr>
<tr>
<td>Diamond Mine</td>
<td>07/01/1971</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.06</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Diamond Sculls</td>
<td>07/20/1972</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U121.02</td>
<td>17:16:00.16</td>
</tr>
<tr>
<td>Diana Mist</td>
<td>02/11/1970</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.06</td>
<td>19:15:00.04</td>
</tr>
<tr>
<td>Diana Moon</td>
<td>08/27/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11e</td>
<td>16:30:00.04</td>
</tr>
<tr>
<td>Dianthus</td>
<td>02/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10at</td>
<td>19:02:00.16</td>
</tr>
<tr>
<td>Dido Queen</td>
<td>06/05/1973</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.14</td>
<td>17:00:00.17</td>
</tr>
<tr>
<td>Diesel Train</td>
<td>12/05/1969</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.11</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Diluted Waters</td>
<td>06/16/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U5b</td>
<td>16:30:00.15</td>
</tr>
<tr>
<td>Dining Car</td>
<td>04/05/1975</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.18</td>
<td>19:45:00.19</td>
</tr>
<tr>
<td>Discus Thrower</td>
<td>05/27/1966</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U8a</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Disko Elm</td>
<td>09/14/1989</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12p.03</td>
<td>15:00:00.10</td>
</tr>
<tr>
<td><strong>Distant Zenith</strong></td>
<td><strong>09/19/1991</strong></td>
<td><strong>LLNL/DoD</strong></td>
<td><strong>NTS</strong></td>
<td><strong>U12p.04</strong></td>
<td><strong>16:30:00.07</strong></td>
</tr>
<tr>
<td>Divider</td>
<td>09/23/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ml</td>
<td>15:04:00.00</td>
</tr>
<tr>
<td>Dixie</td>
<td>04/06/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>U10a</td>
<td>13:33:00.14</td>
</tr>
<tr>
<td>Dofino</td>
<td>03/08/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ba</td>
<td>14:24:00.16</td>
</tr>
<tr>
<td>Dofino-Lawton</td>
<td>03/08/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ba</td>
<td>14:24:00.16</td>
</tr>
<tr>
<td>Dog</td>
<td>04/07/1951</td>
<td>LANL</td>
<td>Eniwetok</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Dog</td>
<td>11/01/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>19:02:00.16</td>
</tr>
<tr>
<td>Dog</td>
<td>05/01/1952</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Dogwood</td>
<td>07/05/1958</td>
<td>LLNL</td>
<td>Eniwetok</td>
<td>- - -</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Dolcetto</td>
<td>08/30/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bi</td>
<td>15:04:00.10</td>
</tr>
<tr>
<td>Dona Ana</td>
<td>10/16/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>17:08:30.04</td>
</tr>
<tr>
<td>Door Mist</td>
<td>08/31/1967</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12g.07</td>
<td>16:30:00.04</td>
</tr>
<tr>
<td>Doppler</td>
<td>08/23/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>17:08:30.04</td>
</tr>
<tr>
<td>Dormouse</td>
<td>01/30/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aq</td>
<td>18:00:00.13</td>
</tr>
<tr>
<td>Dormouse Prime</td>
<td>04/05/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3az</td>
<td>18:00:00.13</td>
</tr>
<tr>
<td>Dorsal Fin</td>
<td>02/29/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12e.10</td>
<td>17:08:30.04</td>
</tr>
<tr>
<td>Double Tracks</td>
<td>05/15/1963</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.03</td>
<td>17:16:00.16</td>
</tr>
<tr>
<td>Double Play</td>
<td>06/15/1966</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.03</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Dovekie</td>
<td>01/21/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cd</td>
<td>18:28:00.04</td>
</tr>
<tr>
<td>Draughts</td>
<td>09/27/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7al</td>
<td>17:00:00.07</td>
</tr>
<tr>
<td>Drill (Source-Lower)</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ai</td>
<td>21:15:00.16</td>
</tr>
<tr>
<td>Drill (Target-Upper)</td>
<td>12/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ai</td>
<td>21:15:00.16</td>
</tr>
<tr>
<td>Driver</td>
<td>05/07/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ar</td>
<td>13:33:00.14</td>
</tr>
<tr>
<td>Dub</td>
<td>06/30/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10a</td>
<td>13:33:00.14</td>
</tr>
<tr>
<td>Duffer</td>
<td>06/18/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ds</td>
<td>13:30:00.20</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>----------</td>
<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>37.210</td>
<td>-116.211</td>
<td>2230</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.010</td>
<td>-116.203</td>
<td>1899</td>
<td>Tunnel</td>
<td>Vela Uniform</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.234</td>
<td>-116.158</td>
<td>1656</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.204</td>
<td>1896</td>
<td>Tunnel</td>
<td>Vela Uniform</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.214</td>
<td>-116.184</td>
<td>2113</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.201</td>
<td>-116.206</td>
<td>2229</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.877</td>
<td>-115.932</td>
<td>1004</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.057</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.185</td>
<td>-116.216</td>
<td>2247</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.180</td>
<td>-116.212</td>
<td>2207</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.818</td>
<td>-115.957</td>
<td>916</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.215</td>
<td>2238</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.236</td>
<td>-116.099</td>
<td>1380</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>22 kt</td>
</tr>
<tr>
<td>37.236</td>
<td>-116.164</td>
<td>1917</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.236</td>
<td>-116.167</td>
<td>1921</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.021</td>
<td>-115.989</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>11 kt</td>
</tr>
<tr>
<td>37.176</td>
<td>-116.054</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.176</td>
<td>-116.054</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>81 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>21 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>19 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>397 kt</td>
</tr>
<tr>
<td>37.090</td>
<td>-116.000</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>37 tons</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.210</td>
<td>2295</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>11 kt</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.040</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.024</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10.6 kt</td>
</tr>
<tr>
<td>37.185</td>
<td>-116.212</td>
<td>2260</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Storage-Transportation</td>
<td>Zero</td>
</tr>
<tr>
<td>37.010</td>
<td>-116.204</td>
<td>1954</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.032</td>
<td>-116.017</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.074</td>
<td>-116.021</td>
<td>1234</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.071</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3.4 kt</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.071</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.041</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.057</td>
<td>1282</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>11.7 kt</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.039</td>
<td>1288</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Dulce</td>
<td>06/17/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dumont</td>
<td>05/19/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2t</td>
<td>13:56:28.14</td>
</tr>
<tr>
<td>Duoro</td>
<td>06/20/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lv</td>
<td>15:15:00.09</td>
</tr>
<tr>
<td>Duryea</td>
<td>04/14/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20a1</td>
<td>14:13:43.10</td>
</tr>
<tr>
<td>Dutchess</td>
<td>10/24/1980</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7bm</td>
<td>19:15:00.12</td>
</tr>
<tr>
<td>Eagle</td>
<td>12/12/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9av</td>
<td>16:02:00.15</td>
</tr>
<tr>
<td>Easy</td>
<td>02/01/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td>04/20/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Easy</td>
<td>11/05/1951</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td>05/07/1952</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 1</td>
<td></td>
</tr>
<tr>
<td>Ebbtide</td>
<td>09/15/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kt</td>
<td>14:36:30.08</td>
</tr>
<tr>
<td>Edam</td>
<td>04/24/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dy</td>
<td>14:10:00.17</td>
</tr>
<tr>
<td>Eddy</td>
<td>09/19/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Eel</td>
<td>05/19/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9m</td>
<td>15:00:00.16</td>
</tr>
<tr>
<td>Effendi</td>
<td>04/27/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ap</td>
<td>14:45:00.00</td>
</tr>
<tr>
<td>Egmont</td>
<td>12/09/1984</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20a1</td>
<td>19:40:00.09</td>
</tr>
<tr>
<td>Elder</td>
<td>06/27/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Elida</td>
<td>12/19/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hy</td>
<td>19:16:00.11</td>
</tr>
<tr>
<td>Elkhart</td>
<td>09/17/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bs</td>
<td>15:08:23.10</td>
</tr>
<tr>
<td>Embudo</td>
<td>06/16/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hd</td>
<td>14:50:00.04</td>
</tr>
<tr>
<td>Emerson</td>
<td>12/16/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2al</td>
<td>15:39:18.15</td>
</tr>
<tr>
<td>Emmenthal</td>
<td>11/02/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19t</td>
<td>15:25:00.17</td>
</tr>
<tr>
<td>Encino</td>
<td>05/12/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Encore</td>
<td>05/08/1953</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Erie</td>
<td>05/30/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ermine</td>
<td>03/06/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ab</td>
<td>16:30:00.13</td>
</tr>
<tr>
<td>Escabosa</td>
<td>07/10/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ac</td>
<td>16:00:00.09</td>
</tr>
<tr>
<td>Esrom</td>
<td>02/04/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7ak</td>
<td>14:40:00.16</td>
</tr>
<tr>
<td>Ess</td>
<td>03/23/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 10</td>
<td>20:30:00.00</td>
</tr>
<tr>
<td>Estaca</td>
<td>10/17/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ja</td>
<td>17:13:00.12</td>
</tr>
<tr>
<td>Estuary</td>
<td>03/09/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U19g</td>
<td>14:00:00.09</td>
</tr>
<tr>
<td>Evans</td>
<td>10/29/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.04</td>
<td>00:00:00.15</td>
</tr>
<tr>
<td>Fade</td>
<td>06/25/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9be</td>
<td>13:30:00.14</td>
</tr>
<tr>
<td>Fahada</td>
<td>05/26/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bh</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Fay</td>
<td>06/28/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fc</td>
<td>14:44:00.17</td>
</tr>
<tr>
<td>Fallon</td>
<td>05/23/1974</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2dv</td>
<td>13:38:30.16</td>
</tr>
<tr>
<td>Farallones</td>
<td>12/14/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fa</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Farm</td>
<td>12/16/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ab</td>
<td>15:30:00.16</td>
</tr>
<tr>
<td>Faultless</td>
<td>01/19/1968</td>
<td>LLNL</td>
<td>Central Nevada</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.111</td>
<td>-116.059</td>
<td>1252</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>52 kt</td>
<td>Dulce</td>
</tr>
<tr>
<td>37.000</td>
<td>-116.044</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Dumont</td>
</tr>
<tr>
<td>37.243</td>
<td>-116.432</td>
<td>1960</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>70 kt</td>
<td>Duryea</td>
</tr>
<tr>
<td>37.075</td>
<td>-116.000</td>
<td>1265</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Less than 20 kt</td>
<td>Dutchess</td>
</tr>
<tr>
<td>37.131</td>
<td>-116.045</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>5.3 kt</td>
<td>Eagle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>1 kt</td>
<td>Easy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>47 kt</td>
<td>Easy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>31 kt</td>
<td>Easy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>12 kt</td>
<td>Easy</td>
</tr>
<tr>
<td>37.033</td>
<td>-116.044</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Ebblide</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.088</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Edam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>83 tons</td>
<td>Eddy</td>
</tr>
<tr>
<td>37.123</td>
<td>-116.048</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>4.5 kt</td>
<td>Eel</td>
</tr>
<tr>
<td>37.139</td>
<td>-116.064</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Effendi</td>
</tr>
<tr>
<td>37.270</td>
<td>-116.498</td>
<td>1839</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Egmont</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>880 kt</td>
<td>Elder</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.032</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Elida</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.035</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Elkhart</td>
</tr>
<tr>
<td>37.033</td>
<td>-116.015</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Embudo</td>
</tr>
<tr>
<td>37.141</td>
<td>-116.064</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Emerson</td>
</tr>
<tr>
<td>37.288</td>
<td>-116.298</td>
<td>2104</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Emmenthal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>500 kt</td>
<td>Encino</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>27 kt</td>
<td>Encore</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>14.9 kt</td>
<td>Erie</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
<td>Ermine</td>
</tr>
<tr>
<td>37.075</td>
<td>-116.033</td>
<td>1223</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Escabosa</td>
</tr>
<tr>
<td>37.107</td>
<td>-116.038</td>
<td>1258</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Esrom</td>
</tr>
<tr>
<td>37.170</td>
<td>-116.045</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Ess</td>
</tr>
<tr>
<td>37.006</td>
<td>-116.016</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Estaca</td>
</tr>
<tr>
<td>37.310</td>
<td>-116.365</td>
<td>2025</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 500 kt</td>
<td>Estuary</td>
</tr>
<tr>
<td>37.195</td>
<td>-116.206</td>
<td>2000</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>55 tons</td>
<td>Evans</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.030</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fade</td>
</tr>
<tr>
<td>37.103</td>
<td>-116.007</td>
<td>1312</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fahada</td>
</tr>
<tr>
<td>37.143</td>
<td>-116.088</td>
<td>1303</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Fajy</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.080</td>
<td>1276</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 200 kt</td>
<td>Fallon</td>
</tr>
<tr>
<td>37.136</td>
<td>-116.087</td>
<td>1290</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Farallones</td>
</tr>
<tr>
<td>37.273</td>
<td>-116.411</td>
<td>1979</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Farm</td>
</tr>
<tr>
<td>38.634</td>
<td>-118.133</td>
<td>1834</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Faultless</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Fawn</td>
<td>04/07/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eo</td>
<td>15:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Feather</td>
<td>12/22/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.08</td>
<td>16:30:00.13</td>
<td></td>
</tr>
<tr>
<td>Fenton</td>
<td>04/23/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2m1</td>
<td>14:55:26.14</td>
<td></td>
</tr>
<tr>
<td>Ferret</td>
<td>02/08/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3bf</td>
<td>18:30:00.13</td>
<td></td>
</tr>
<tr>
<td>Ferret Prime</td>
<td>04/05/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3by</td>
<td>17:52:00.13</td>
<td></td>
</tr>
<tr>
<td>Fig</td>
<td>08/18/1958</td>
<td>LLNL/DoD</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>File</td>
<td>10/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gb</td>
<td>18:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Finfoot</td>
<td>03/07/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3du</td>
<td>18:41:00.07</td>
<td></td>
</tr>
<tr>
<td>Fir</td>
<td>05/11/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher</td>
<td>12/03/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ah</td>
<td>23:04:59.63</td>
<td></td>
</tr>
<tr>
<td>Fizeau</td>
<td>09/14/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fr</td>
<td>15:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Fizz</td>
<td>03/10/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U2az1</td>
<td>15:00:00.05</td>
<td></td>
</tr>
<tr>
<td>Flask-Green</td>
<td>05/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2az3</td>
<td>15:00:00.05</td>
<td></td>
</tr>
<tr>
<td>Flask-Red</td>
<td>05/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2az2</td>
<td>15:00:00.05</td>
<td></td>
</tr>
<tr>
<td>Flathead</td>
<td>06/11/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flax-Backup</td>
<td>12/21/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dj</td>
<td>20:15:24.35</td>
<td></td>
</tr>
<tr>
<td>Flax-Source</td>
<td>12/21/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dj</td>
<td>20:15:00.24</td>
<td></td>
</tr>
<tr>
<td>Flax-Test</td>
<td>12/21/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dj</td>
<td>20:15:24.35</td>
<td></td>
</tr>
<tr>
<td>Flora</td>
<td>05/22/1980</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lg</td>
<td>13:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Flotost</td>
<td>08/16/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ao</td>
<td>15:49:00.17</td>
<td></td>
</tr>
<tr>
<td>Floydada</td>
<td>08/15/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U7cb</td>
<td>16:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Fob-Blue</td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9iy27</td>
<td>16:30:00.21</td>
<td></td>
</tr>
<tr>
<td>Fob-Green</td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9iv27</td>
<td>16:30:00.21</td>
<td></td>
</tr>
<tr>
<td>Fob-Red</td>
<td>01/23/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9iv24</td>
<td>16:30:00.21</td>
<td></td>
</tr>
<tr>
<td>Fondutta</td>
<td>04/11/1978</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U19zs</td>
<td>15:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Fontina</td>
<td>02/12/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20f</td>
<td>14:45:00.16</td>
<td></td>
</tr>
<tr>
<td>Fore</td>
<td>01/16/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ao</td>
<td>16:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Forefoot</td>
<td>06/02/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kf</td>
<td>17:15:00.10</td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td>10/31/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7a</td>
<td>17:04:58.61</td>
<td></td>
</tr>
<tr>
<td>Fox</td>
<td>02/06/1951</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td>17:04:58.61</td>
<td></td>
</tr>
<tr>
<td>Franklin</td>
<td>06/02/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 4</td>
<td>17:04:58.61</td>
<td></td>
</tr>
<tr>
<td>Franklin Prime</td>
<td>08/30/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>17:04:58.61</td>
<td></td>
</tr>
<tr>
<td>Freezeout</td>
<td>05/11/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kw</td>
<td>16:00:00.10</td>
<td></td>
</tr>
<tr>
<td>Frigate Bird</td>
<td>05/06/1962</td>
<td>LLNL/DoD</td>
<td>Pacific</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frijoles-Deming</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3iw</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Frijoles-Espuela</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ju</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>---------------</td>
<td>--------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.054</td>
<td>-116.023</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fawn</td>
</tr>
<tr>
<td>37.195</td>
<td>-116.209</td>
<td>2242</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>150 tons</td>
<td>Feather</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.084</td>
<td>1321</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.4 kt</td>
<td>Fenton</td>
</tr>
<tr>
<td>37.058</td>
<td>-116.030</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Ferret</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.025</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Ferret Prime</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>20 tons</td>
<td>Fig</td>
</tr>
<tr>
<td>37.017</td>
<td>-116.037</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>File</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.030</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Finfoot</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>1.36 Mt</td>
<td>Fir</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.029</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>13.4 kt</td>
<td>Fisher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>Fizeau</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Fizz</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.063</td>
<td>1251</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>105 kt</td>
<td>Flask-Green</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.068</td>
<td>1259</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>35 tons</td>
<td>Flask-Red</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.064</td>
<td>1259</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>90 tons</td>
<td>Flask-Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>365 kt</td>
<td>Flathead</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Flax-Backup</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Flax-Source</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.084</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>20 to 200 kt</td>
<td>Flax-Test</td>
</tr>
<tr>
<td>37.003</td>
<td>-116.032</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Flora</td>
</tr>
<tr>
<td>37.147</td>
<td>-116.064</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Flotost</td>
</tr>
<tr>
<td>37.087</td>
<td>-116.003</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Floydada</td>
</tr>
<tr>
<td>37.141</td>
<td>-116.034</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fob-Blue</td>
</tr>
<tr>
<td>37.141</td>
<td>-116.038</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fob-Green</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.038</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Fob-Red</td>
</tr>
<tr>
<td>37.300</td>
<td>-116.328</td>
<td>2072</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Fondutta</td>
</tr>
<tr>
<td>37.271</td>
<td>-116.489</td>
<td>1837</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Fontina</td>
</tr>
<tr>
<td>37.142</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Fore</td>
</tr>
<tr>
<td>37.055</td>
<td>-116.026</td>
<td>1207</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Forefoot</td>
</tr>
<tr>
<td>37.107</td>
<td>-116.033</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Forest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>22 kt</td>
<td>Fox</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>11 kt</td>
<td>Fox</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>140 tons</td>
<td>Franklin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>4.7 kt</td>
<td>Franklin Prime</td>
</tr>
<tr>
<td>36.998</td>
<td>-116.019</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Freezeout</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Frigate Bird</td>
</tr>
<tr>
<td>37.022</td>
<td>-116.020</td>
<td>1186</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Frijoles-Deming</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.017</td>
<td>1186</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Frijoles-Espuela</td>
</tr>
</tbody>
</table>
## United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date (mm/dd/yyyy) (GMT)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frijoles-Guaje</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hf</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Frijoles-Petaca</td>
<td>09/22/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hz</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Frisco</td>
<td>09/23/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8m</td>
<td>17:00:00.09</td>
</tr>
<tr>
<td>Funnel</td>
<td>06/25/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ga</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Futtock</td>
<td>06/18/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3eh</td>
<td>11:49:00.09</td>
</tr>
<tr>
<td>Galena-Green</td>
<td>06/23/1992</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cv</td>
<td>15:00:00.07</td>
</tr>
<tr>
<td>Galena-Orange</td>
<td>06/23/1992</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cv</td>
<td>15:00:00.07</td>
</tr>
<tr>
<td>Galena-Yellow</td>
<td>06/23/1992</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cv</td>
<td>15:00:00.07</td>
</tr>
<tr>
<td>Galileo</td>
<td>09/02/1957</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galveston</td>
<td>09/04/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U19af</td>
<td>16:09:00.06</td>
</tr>
<tr>
<td>Ganymede</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9g</td>
<td></td>
</tr>
<tr>
<td>Garden</td>
<td>10/23/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aj</td>
<td>15:00:00.94</td>
</tr>
<tr>
<td>Gasbuggy</td>
<td>12/10/1967</td>
<td>LLNL</td>
<td>Farmington, New Mexico</td>
<td>- - -</td>
<td>19:30:00.14</td>
</tr>
<tr>
<td>Gascon</td>
<td>11/14/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U4t</td>
<td>16:00:00.07</td>
</tr>
<tr>
<td>Gazook</td>
<td>03/23/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2do</td>
<td>20:15:00.17</td>
</tr>
<tr>
<td>George</td>
<td>05/08/1951</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>George</td>
<td>06/01/1952</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerbil</td>
<td>03/29/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bp</td>
<td>15:49:00.12</td>
</tr>
<tr>
<td>Gibne</td>
<td>04/25/1982</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U20ah</td>
<td>18:05:00.09</td>
</tr>
<tr>
<td>Gibson</td>
<td>08/04/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ew</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Gilroy</td>
<td>09/15/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ex</td>
<td>17:30:00.04</td>
</tr>
<tr>
<td>Glencooe</td>
<td>03/22/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U4i</td>
<td>16:15:00.08</td>
</tr>
<tr>
<td>Gnome</td>
<td>12/10/1961</td>
<td>LLNL</td>
<td>Carlsbad, New Mexico</td>
<td>- - -</td>
<td>19:00:00.00</td>
</tr>
<tr>
<td>Goldstone</td>
<td>12/28/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ao</td>
<td>19:01:00.09</td>
</tr>
<tr>
<td>Gorbea</td>
<td>01/31/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cq</td>
<td>15:30:00.08</td>
</tr>
<tr>
<td>Gouda</td>
<td>10/06/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ef</td>
<td>14:30:00.16</td>
</tr>
<tr>
<td>Gourd-Amber</td>
<td>04/24/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bf</td>
<td>13:04:00.14</td>
</tr>
<tr>
<td>Gourd-Brown</td>
<td>04/24/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bl</td>
<td>13:04:00.14</td>
</tr>
<tr>
<td>Grable</td>
<td>05/25/1953</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grape A</td>
<td>12/17/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U7s</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Grape B</td>
<td>02/04/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7v</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Greeley</td>
<td>12/20/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20g</td>
<td>15:30:00.08</td>
</tr>
<tr>
<td>Greys</td>
<td>11/22/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ax</td>
<td>17:30:00.15</td>
</tr>
<tr>
<td>Grove</td>
<td>05/22/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ds</td>
<td>14:15:00.17</td>
</tr>
<tr>
<td>Grunion</td>
<td>10/11/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bz</td>
<td>14:00:00.11</td>
</tr>
<tr>
<td>Gruyere</td>
<td>08/16/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cq</td>
<td>14:41:00.16</td>
</tr>
<tr>
<td>Gruyere-Gradino</td>
<td>08/16/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cq</td>
<td>14:41:00.16</td>
</tr>
<tr>
<td>Guanay</td>
<td>09/04/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3di</td>
<td>18:15:00.08</td>
</tr>
<tr>
<td>Gum Drop</td>
<td>04/21/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U16a.02</td>
<td>22:00:00.03</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>37.024</td>
<td>-116.016</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.022</td>
<td>-116.017</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.175</td>
<td>-116.089</td>
<td>1347</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.031</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.066</td>
<td>-116.023</td>
<td>1221</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.032</td>
<td>1269</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.032</td>
<td>1269</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.240</td>
<td>-116.369</td>
<td>2018</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.032</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.678</td>
<td>-107.209</td>
<td>2179</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>29 kt</td>
</tr>
<tr>
<td>37.100</td>
<td>-116.049</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.088</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>225 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>15 kt</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.019</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.256</td>
<td>-116.423</td>
<td>1937</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.024</td>
<td>-116.013</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.035</td>
<td>-116.022</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.083</td>
<td>-116.067</td>
<td>1233</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>29 kt</td>
</tr>
<tr>
<td>32.264</td>
<td>-103.866</td>
<td>1013</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3 kt</td>
</tr>
<tr>
<td>37.238</td>
<td>-116.474</td>
<td>1887</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.123</td>
<td>1344</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.135</td>
<td>-116.063</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.164</td>
<td>-116.081</td>
<td>1320</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.082</td>
<td>1317</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airburst</td>
<td>Weapons Related</td>
<td>15 kt</td>
</tr>
<tr>
<td>37.083</td>
<td>-116.002</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.098</td>
<td>-116.027</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.302</td>
<td>-116.409</td>
<td>1945</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>870 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.046</td>
<td>1248</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate</td>
</tr>
<tr>
<td>37.115</td>
<td>-116.076</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.022</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.145</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.145</td>
<td>-116.050</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.018</td>
<td>-116.024</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.203</td>
<td>1931</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Gundi Prime</td>
<td>05/09/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3db</td>
<td>18:19:00.00</td>
</tr>
<tr>
<td>Gundi</td>
<td>11/15/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bm</td>
<td>16:30:00.08</td>
</tr>
<tr>
<td>HA (High Altitude)</td>
<td>04/06/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 1</td>
<td></td>
</tr>
<tr>
<td>Haddock</td>
<td>08/28/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dl</td>
<td>17:06:00.04</td>
</tr>
<tr>
<td>Halfbeak</td>
<td>06/30/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U19b</td>
<td>22:15:00.07</td>
</tr>
<tr>
<td>Hamilton</td>
<td>10/15/1958</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>Handcar</td>
<td>11/05/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10b</td>
<td>15:00:00.11</td>
</tr>
<tr>
<td>Handicap</td>
<td>03/12/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ba</td>
<td>15:00:00.01</td>
</tr>
<tr>
<td>Handley</td>
<td>03/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20m</td>
<td>19:00:00.20</td>
</tr>
<tr>
<td>Hoploappus</td>
<td>06/28/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsw22</td>
<td>16:30:03.16</td>
</tr>
<tr>
<td>Hard Hat</td>
<td>02/15/1962</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U15a</td>
<td>18:00:00.10</td>
</tr>
<tr>
<td>Hardin</td>
<td>04/30/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20av</td>
<td>13:30:00.09</td>
</tr>
<tr>
<td>Harebell</td>
<td>06/24/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2br</td>
<td>14:00:00.16</td>
</tr>
<tr>
<td>Harlee</td>
<td>05/17/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3bv</td>
<td>14:55:00.00</td>
</tr>
<tr>
<td>Harleen</td>
<td>06/12/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Harlingen-A</td>
<td>08/23/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U6g</td>
<td>18:30:00.08</td>
</tr>
<tr>
<td>Harlingen-B</td>
<td>08/23/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U6h</td>
<td>18:30:00.08</td>
</tr>
<tr>
<td>Harry</td>
<td>05/19/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
</tr>
<tr>
<td>Harzer</td>
<td>06/06/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19aj</td>
<td>18:00:00.08</td>
</tr>
<tr>
<td>Hatchet</td>
<td>05/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fz</td>
<td>16:00:00.04</td>
</tr>
<tr>
<td>Havarti</td>
<td>08/05/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9e</td>
<td>16:00:01.15</td>
</tr>
<tr>
<td>Haymaker</td>
<td>06/27/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3au(s)</td>
<td>18:00:00.12</td>
</tr>
<tr>
<td>Hazzlebrook-Apricot (Orange)</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
<td>15:20:00.08</td>
</tr>
<tr>
<td>Hazzlebrook-Checkerberry (Red)</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
<td>15:20:00.08</td>
</tr>
<tr>
<td>Hazzlebrook-Emerald (Green)</td>
<td>02/03/1987</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bh</td>
<td>15:20:00.08</td>
</tr>
<tr>
<td>Hearts</td>
<td>09/06/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U4n</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Heilmann</td>
<td>04/06/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cg</td>
<td>15:00:00.12</td>
</tr>
<tr>
<td>Hermosa</td>
<td>04/02/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bs</td>
<td>20:00:00.09</td>
</tr>
<tr>
<td>Hickory</td>
<td>06/29/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Hidalgo</td>
<td>10/05/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Hod-A (Green)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx23</td>
<td>14:40:00.17</td>
</tr>
<tr>
<td>Hod-B (Red)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx20</td>
<td>14:40:00.17</td>
</tr>
<tr>
<td>Hod-C (Blue)</td>
<td>05/01/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9iz25</td>
<td>14:25:00.00</td>
</tr>
<tr>
<td>Hognose</td>
<td>03/15/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ai</td>
<td>16:30:00.13</td>
</tr>
<tr>
<td>Holly</td>
<td>05/20/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Hood</td>
<td>07/05/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
</tr>
<tr>
<td>Hook</td>
<td>04/14/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bc</td>
<td>14:40:00.15</td>
</tr>
<tr>
<td>Hoopoe</td>
<td>12/16/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cf</td>
<td>20:00:00.07</td>
</tr>
</tbody>
</table>
### July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.049</td>
<td>-116.016</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Gundi Prime</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.025</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Gundi</td>
</tr>
<tr>
<td>37.067</td>
<td>-116.023</td>
<td>1222</td>
<td>Airdrop</td>
<td>Weapons Effects</td>
<td>3 kt</td>
<td>HA (High Altitude)</td>
</tr>
<tr>
<td>37.316</td>
<td>-116.300</td>
<td>2043</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>365 kt</td>
<td>Halfbeak</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.068</td>
<td>1307</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>12 kt</td>
<td>Handcar</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Handicap</td>
</tr>
<tr>
<td>37.300</td>
<td>-116.535</td>
<td>1772</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>More than 1 Mt</td>
<td>Handley</td>
</tr>
<tr>
<td>37.135</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Haploappus</td>
</tr>
<tr>
<td>37.226</td>
<td>-116.060</td>
<td>1532</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>5.7 kt</td>
<td>Hard Hat</td>
</tr>
<tr>
<td>37.233</td>
<td>-116.424</td>
<td>1943</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Hardin</td>
</tr>
<tr>
<td>37.147</td>
<td>-116.068</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Harebell</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.033</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Harkee</td>
</tr>
<tr>
<td>36.991</td>
<td>-116.019</td>
<td>1175</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>1.2 Mt</td>
<td>Harlem</td>
</tr>
<tr>
<td>36.989</td>
<td>-116.019</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Harlingen-A</td>
</tr>
<tr>
<td>36.991</td>
<td>-116.019</td>
<td>1175</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>32 kt</td>
<td>Harry</td>
</tr>
<tr>
<td>37.303</td>
<td>-116.326</td>
<td>2073</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Harzer</td>
</tr>
<tr>
<td>37.029</td>
<td>-116.021</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hatchet</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.040</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hatchie</td>
</tr>
<tr>
<td>37.154</td>
<td>-116.036</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Havarti</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.036</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>67 kt</td>
<td>Haymaker</td>
</tr>
<tr>
<td>37.181</td>
<td>-116.049</td>
<td>1291</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Hazebrook-Apricot (Orange)</td>
</tr>
<tr>
<td>37.181</td>
<td>-116.049</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hazebrook-Checkerberry (Red)</td>
</tr>
<tr>
<td>37.181</td>
<td>-116.049</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hazebrook-Emerald (Green)</td>
</tr>
<tr>
<td>37.088</td>
<td>-116.054</td>
<td>1232</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>140 kt</td>
<td>Hearts</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.134</td>
<td>1405</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Heilman</td>
</tr>
<tr>
<td>37.095</td>
<td>-116.033</td>
<td>1251</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Hermosa</td>
</tr>
<tr>
<td>37.136</td>
<td>-116.035</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hognose</td>
</tr>
<tr>
<td>37.133</td>
<td>-116.035</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hood-A (Green)</td>
</tr>
<tr>
<td>37.138</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Hod-B (Red)</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.032</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hognose</td>
</tr>
<tr>
<td>37.129</td>
<td>-116.031</td>
<td>1276</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>5.9 kt</td>
<td>Holly</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.034</td>
<td>1200</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>74 kt</td>
<td>Hood</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Safety Experiment</td>
<td>77 tons</td>
<td>Hidalgo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hook</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hoopoe</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Hoosic</td>
<td>03/28/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9j</td>
<td>18:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Horehound</td>
<td>08/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gm</td>
<td>13:45:00.04</td>
<td></td>
</tr>
<tr>
<td>Hornet</td>
<td>03/12/1955</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hornitos</td>
<td>10/31/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bc</td>
<td>15:30:00.09</td>
<td></td>
</tr>
<tr>
<td>Hospah</td>
<td>12/14/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3je</td>
<td>21:10:01.04</td>
<td></td>
</tr>
<tr>
<td>Hosta</td>
<td>02/12/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ak</td>
<td>15:25:00.09</td>
<td></td>
</tr>
<tr>
<td>Housatonic</td>
<td>10/30/1962</td>
<td>LLNL</td>
<td>Johnston Island area</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houston</td>
<td>11/14/1990</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U19az</td>
<td>19:17:00.07</td>
<td></td>
</tr>
<tr>
<td>How</td>
<td>06/05/1952</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hoya</td>
<td>09/14/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20be</td>
<td>19:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Hudson Moon</td>
<td>03/26/1970</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12e.12</td>
<td>14:16:00.17</td>
<td></td>
</tr>
<tr>
<td>Hudson Seal</td>
<td>09/24/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.04</td>
<td>17:05:01.09</td>
<td></td>
</tr>
<tr>
<td>Hudson</td>
<td>04/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9n</td>
<td>18:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Hula</td>
<td>10/29/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bu</td>
<td>15:36:00.09</td>
<td></td>
</tr>
<tr>
<td>Hulsea</td>
<td>03/14/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bx</td>
<td>17:00:00.17</td>
<td></td>
</tr>
<tr>
<td>Humboldt</td>
<td>10/29/1958</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunters Trophy</td>
<td>09/18/1992</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.24</td>
<td>17:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Hupmobile</td>
<td>01/18/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2y</td>
<td>16:30:00.13</td>
<td></td>
</tr>
<tr>
<td>Huron</td>
<td>07/21/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huron Landing</td>
<td>09/23/1982</td>
<td>LLNL/LANL/DoD</td>
<td>NTS</td>
<td>U12n.15</td>
<td>16:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Huron King</td>
<td>08/24/1980</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U3ky</td>
<td>15:10:00.07</td>
<td></td>
</tr>
<tr>
<td>Husky Pup</td>
<td>10/24/1975</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.03</td>
<td>17:11:26.09</td>
<td></td>
</tr>
<tr>
<td>Husky Ace</td>
<td>10/12/1973</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.07</td>
<td>17:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Hutch</td>
<td>07/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2df</td>
<td>14:55:00.04</td>
<td></td>
</tr>
<tr>
<td>Hutia</td>
<td>06/06/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bc</td>
<td>14:00:00.13</td>
<td></td>
</tr>
<tr>
<td>Hybla Fair</td>
<td>10/28/1974</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.09</td>
<td>15:00:00.17</td>
<td></td>
</tr>
<tr>
<td>Hybla Gold</td>
<td>11/01/1977</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12e.20</td>
<td>18:06:00.07</td>
<td></td>
</tr>
<tr>
<td>Hyrax</td>
<td>09/14/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bh</td>
<td>17:10:00.12</td>
<td></td>
</tr>
<tr>
<td>Iceberg</td>
<td>03/23/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U4g</td>
<td>16:30:00.20</td>
<td></td>
</tr>
<tr>
<td>Idledrin</td>
<td>07/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2au</td>
<td>13:02:30.04</td>
<td></td>
</tr>
<tr>
<td>Imp</td>
<td>08/09/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bj</td>
<td>13:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Inca</td>
<td>06/21/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingot</td>
<td>03/09/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gg</td>
<td>14:05:00.09</td>
<td></td>
</tr>
<tr>
<td>Inlet</td>
<td>11/20/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U19f</td>
<td>15:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Ipecac-A</td>
<td>05/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hka</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Ipecac-B</td>
<td>05/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkb</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Islay</td>
<td>08/27/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2er</td>
<td>14:31:00.09</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>05/24/1951</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Izzzer</td>
<td>07/16/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bp</td>
<td>13:04:24.10</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.035</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3.4 kt</td>
<td>Hoosic</td>
</tr>
<tr>
<td>36.993</td>
<td>-115.996</td>
<td>1174</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Horehound</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>4 kt</td>
<td>Hornet</td>
</tr>
<tr>
<td>37.263</td>
<td>-116.492</td>
<td>1846</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Horntos</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.030</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hospah</td>
</tr>
<tr>
<td>37.348</td>
<td>-116.317</td>
<td>2076</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Hosta</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>8.3 Mt</td>
<td>Housatonic</td>
</tr>
<tr>
<td>37.227</td>
<td>-116.372</td>
<td>2031</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Houston</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>14 kt</td>
<td>How</td>
</tr>
<tr>
<td>37.226</td>
<td>-116.429</td>
<td>1951</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Hoya</td>
</tr>
<tr>
<td>37.183</td>
<td>-116.214</td>
<td>2274</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Hudson Moon</td>
</tr>
<tr>
<td>37.205</td>
<td>-116.207</td>
<td>2168</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Hudson Seal</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.046</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hudson</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hula</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.065</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Hulsea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>7.8 tons</td>
<td>Humboldt</td>
</tr>
<tr>
<td>37.207</td>
<td>-116.211</td>
<td>1827</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Hunters Trophy</td>
</tr>
<tr>
<td>37.146</td>
<td>-116.067</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7.4 kt</td>
<td>Hupmobile</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>250 kt</td>
<td>Huron</td>
</tr>
<tr>
<td>37.212</td>
<td>-116.208</td>
<td>1824</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Huron Landing</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.035</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Huron King</td>
</tr>
<tr>
<td>37.222</td>
<td>-116.181</td>
<td>2036</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Husky Pup</td>
</tr>
<tr>
<td>37.200</td>
<td>-116.204</td>
<td>2238</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Husky Ace</td>
</tr>
<tr>
<td>37.139</td>
<td>-116.088</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Hutch</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.037</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hutia</td>
</tr>
<tr>
<td>37.201</td>
<td>-116.205</td>
<td>2227</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Hybla Fair</td>
</tr>
<tr>
<td>37.188</td>
<td>-116.214</td>
<td>2239</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Hybla Gold</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.022</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Hyrax</td>
</tr>
<tr>
<td>37.102</td>
<td>-116.052</td>
<td>1239</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Iceberg</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.056</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Ildrim</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.078</td>
<td>1314</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Imp</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>15.2 kt</td>
<td>Inca</td>
</tr>
<tr>
<td>37.143</td>
<td>-116.068</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Ingot</td>
</tr>
<tr>
<td>37.225</td>
<td>-116.368</td>
<td>2025</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Inlet</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.003</td>
<td>1181</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Ipecac-A</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.001</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Ipecac-B</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.067</td>
<td>1297</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Islay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>45.5 kt</td>
<td>Item</td>
</tr>
<tr>
<td>37.115</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Izzer</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Jackpots</td>
<td>06/01/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kj</td>
<td>17:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Jal</td>
<td>03/19/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hh</td>
<td>14:03:30.04</td>
<td></td>
</tr>
<tr>
<td>Jara</td>
<td>06/06/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hp</td>
<td>14:40:00.08</td>
<td></td>
</tr>
<tr>
<td>Jarlsberg</td>
<td>08/27/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ca</td>
<td>14:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Jefferson</td>
<td>04/22/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ai</td>
<td>14:30:00.09</td>
<td></td>
</tr>
<tr>
<td>Jerboa</td>
<td>03/01/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3at</td>
<td>19:00:00.12</td>
<td></td>
</tr>
<tr>
<td>Jib</td>
<td>05/08/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hb</td>
<td>16:55:00.09</td>
<td></td>
</tr>
<tr>
<td>Jicarilla</td>
<td>04/19/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jm</td>
<td>16:42:00.05</td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>07/19/1957</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td></td>
<td>Area 10</td>
<td></td>
</tr>
<tr>
<td>Johnnie Boy</td>
<td>07/11/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td></td>
<td>Area 18</td>
<td></td>
</tr>
<tr>
<td>Jornada</td>
<td>01/28/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U4j</td>
<td>16:00:00.10</td>
<td></td>
</tr>
<tr>
<td>Jorum</td>
<td>09/16/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20e</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Junction</td>
<td>03/26/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U19bg</td>
<td>16:30:00.00</td>
<td></td>
</tr>
<tr>
<td>Juniper</td>
<td>07/22/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juno</td>
<td>10/24/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kankakee</td>
<td>06/15/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10p</td>
<td>18:02:47.13</td>
<td></td>
</tr>
<tr>
<td>Kappeli</td>
<td>07/25/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20am</td>
<td>15:30:00.08</td>
<td></td>
</tr>
<tr>
<td>Kara</td>
<td>05/11/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dh3</td>
<td>14:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Karab</td>
<td>03/16/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ah</td>
<td>15:00:00.07</td>
<td></td>
</tr>
<tr>
<td>Kash</td>
<td>06/12/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20af</td>
<td>17:15:00.09</td>
<td></td>
</tr>
<tr>
<td>Kashan</td>
<td>05/24/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10av</td>
<td>13:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Kasseri</td>
<td>10/28/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20z</td>
<td>14:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Kaweah</td>
<td>02/21/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ab</td>
<td>19:47:00.14</td>
<td></td>
</tr>
<tr>
<td>Kawich A-Blue</td>
<td>12/09/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8n</td>
<td>15:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Kawich A-White</td>
<td>12/09/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8n</td>
<td>15:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Kawich-Black</td>
<td>02/24/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cu</td>
<td>16:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Kawich-Red</td>
<td>02/24/1989</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cu</td>
<td>16:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Kearsarge</td>
<td>08/17/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ax</td>
<td>17:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Keel</td>
<td>12/16/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hu</td>
<td>17:30:00.09</td>
<td></td>
</tr>
<tr>
<td>Keelson</td>
<td>02/04/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ai</td>
<td>14:20:00.11</td>
<td></td>
</tr>
<tr>
<td>Kennebec</td>
<td>06/25/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2af</td>
<td>23:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Kepler</td>
<td>07/24/1957</td>
<td>LANL</td>
<td>NTS</td>
<td></td>
<td>Area 4</td>
<td></td>
</tr>
<tr>
<td>Kermet</td>
<td>11/23/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2c</td>
<td>18:17:32.10</td>
<td></td>
</tr>
<tr>
<td>Kernville</td>
<td>02/15/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ar</td>
<td>18:10:00.09</td>
<td></td>
</tr>
<tr>
<td>Kesti</td>
<td>06/16/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cn</td>
<td>14:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Kestrel</td>
<td>04/05/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dd</td>
<td>21:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Khaki</td>
<td>10/15/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3et</td>
<td>19:00:00.05</td>
<td></td>
</tr>
<tr>
<td>Kickapoo</td>
<td>06/13/1956</td>
<td>LLNL</td>
<td>Eniwetok</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King</td>
<td>11/15/1952</td>
<td>LANL</td>
<td>Eniwetok</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.021</td>
<td>-116.033</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jackpots</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.024</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jal</td>
</tr>
<tr>
<td>37.004</td>
<td>-116.024</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jara</td>
</tr>
<tr>
<td>37.193</td>
<td>-116.035</td>
<td>1318</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jarlsberg</td>
</tr>
<tr>
<td>37.264</td>
<td>-116.441</td>
<td>1955</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Jefferson</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.027</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Jerboa</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.002</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jib</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.017</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Jicarilla</td>
</tr>
<tr>
<td>37.122</td>
<td>-116.334</td>
<td>1544</td>
<td>Crater</td>
<td>Weapons Effects</td>
<td>About 2 kt</td>
<td>John</td>
</tr>
<tr>
<td>37.091</td>
<td>-116.052</td>
<td>1233</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>139 kt</td>
<td>Jornada</td>
</tr>
<tr>
<td>37.314</td>
<td>-116.462</td>
<td>1898</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 1 Mt</td>
<td>Jorum</td>
</tr>
<tr>
<td>37.272</td>
<td>-116.361</td>
<td>2013</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Junction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>65 kt</td>
<td>Juniper</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>1.7 tons</td>
<td>Juno</td>
</tr>
<tr>
<td>37.171</td>
<td>-116.050</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Kankakee</td>
</tr>
<tr>
<td>37.268</td>
<td>-116.412</td>
<td>1982</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Kappeli</td>
</tr>
<tr>
<td>37.112</td>
<td>-116.085</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kara</td>
</tr>
<tr>
<td>37.085</td>
<td>-116.082</td>
<td>1247</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Karab</td>
</tr>
<tr>
<td>37.282</td>
<td>-116.455</td>
<td>1911</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Kash</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.057</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kashan</td>
</tr>
<tr>
<td>37.290</td>
<td>-116.412</td>
<td>1957</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
<td>Kasseri</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.047</td>
<td>1249</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3 kt</td>
<td>Kaweah</td>
</tr>
<tr>
<td>37.175</td>
<td>-116.093</td>
<td>1357</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Kawich-A-Blue</td>
</tr>
<tr>
<td>37.175</td>
<td>-116.093</td>
<td>1357</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Kawich-A-White</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.123</td>
<td>1352</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Kawich-Black</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.123</td>
<td>1352</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kawich-Red</td>
</tr>
<tr>
<td>37.297</td>
<td>-116.307</td>
<td>2102</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>100 to 150 kt</td>
<td>Kearsarge</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.018</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Keel</td>
</tr>
<tr>
<td>37.069</td>
<td>-116.031</td>
<td>1218</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Keelson</td>
</tr>
<tr>
<td>37.131</td>
<td>-116.069</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Kennebec</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>10 kt</td>
<td>Kepler</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.072</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kermet</td>
</tr>
<tr>
<td>37.314</td>
<td>-116.472</td>
<td>1899</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Kernville</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.017</td>
<td>1312</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kesti</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.024</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kestrel</td>
</tr>
<tr>
<td>37.047</td>
<td>-116.018</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Khaki</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>1.49 kt</td>
<td>Kickapoo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>500 kt</td>
<td>King</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>---------------------------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Kingfish</td>
<td>11/01/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Kinibito</td>
<td>12/05/1985</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3me</td>
<td>15:00:00.07</td>
<td></td>
</tr>
<tr>
<td>Klickitat</td>
<td>02/20/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10e</td>
<td>15:30:00.15</td>
<td></td>
</tr>
<tr>
<td>Kloster</td>
<td>02/15/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eo</td>
<td>18:05:00.16</td>
<td></td>
</tr>
<tr>
<td>Knickerbocker</td>
<td>05/26/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20d</td>
<td>15:00:01.50</td>
<td></td>
</tr>
<tr>
<td>Knife A</td>
<td>09/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fb</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Knife B</td>
<td>11/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dz</td>
<td>15:45:00.04</td>
<td></td>
</tr>
<tr>
<td>Knox</td>
<td>10/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3er</td>
<td>14:29:00.04</td>
<td></td>
</tr>
<tr>
<td>Koa</td>
<td>05/12/1958</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Kohocton</td>
<td>08/23/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ak</td>
<td>13:20:00.15</td>
<td></td>
</tr>
<tr>
<td>Koon</td>
<td>04/06/1954</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Kootanai</td>
<td>04/24/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9w</td>
<td>16:09:30.14</td>
<td></td>
</tr>
<tr>
<td>Kryddost</td>
<td>05/06/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2co</td>
<td>20:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Kyack-A</td>
<td>09/20/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bq1</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Kyack-B</td>
<td>09/20/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bq2</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Laban</td>
<td>08/03/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ff</td>
<td>13:33:00.10</td>
<td></td>
</tr>
<tr>
<td>Labis</td>
<td>02/05/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19an</td>
<td>15:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Labquark</td>
<td>09/30/1986</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19an</td>
<td>22:30:00.10</td>
<td></td>
</tr>
<tr>
<td>Lacrosse</td>
<td>05/04/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lagoon</td>
<td>10/14/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ar</td>
<td>14:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Laguna</td>
<td>06/23/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fd</td>
<td>15:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Lampblack</td>
<td>01/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7i</td>
<td>18:35:00.04</td>
<td></td>
</tr>
<tr>
<td>Lanpher</td>
<td>10/18/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2x</td>
<td>14:30:00.08</td>
<td></td>
</tr>
<tr>
<td>Laplace</td>
<td>09/08/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>U20d</td>
<td>15:00:00.16</td>
<td></td>
</tr>
<tr>
<td><strong>Laredo</strong></td>
<td><strong>05/21/1988</strong></td>
<td><strong>LANL</strong></td>
<td><strong>NTS</strong></td>
<td><strong>U3mh</strong></td>
<td><strong>22:30:00.14</strong></td>
<td></td>
</tr>
<tr>
<td>Lassen</td>
<td>06/05/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4d</td>
<td>17:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Latir</td>
<td>02/27/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lea</td>
<td>10/13/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Ledoux</td>
<td>09/27/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1a.01</td>
<td>18:02:46.00</td>
<td></td>
</tr>
<tr>
<td>Lexington</td>
<td>08/24/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bm</td>
<td>13:30:00.00</td>
<td></td>
</tr>
<tr>
<td>Leyden</td>
<td>11/26/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cm</td>
<td>15:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td>04/01/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7j</td>
<td>18:40:00.04</td>
<td></td>
</tr>
<tr>
<td>Linden</td>
<td>06/18/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Links</td>
<td>07/23/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bf</td>
<td>13:30:00.15</td>
<td></td>
</tr>
<tr>
<td>Liptauer</td>
<td>04/03/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eh</td>
<td>14:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Little Feller I</td>
<td>07/17/1962</td>
<td>SNL/DoD</td>
<td>NTS</td>
<td>Area 18</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Little Feller II</td>
<td>07/07/1962</td>
<td>SNL/DoD</td>
<td>NTS</td>
<td>Area 18</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lockney</td>
<td>09/24/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U19aq</td>
<td>15:00:00.06</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>----------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.053</td>
<td>-116.046</td>
<td>1208</td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>Submegaton</td>
<td>Kingfish</td>
</tr>
<tr>
<td>37.151</td>
<td>-116.041</td>
<td>1273</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Kinibito</td>
</tr>
<tr>
<td>37.152</td>
<td>-116.073</td>
<td>1297</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>70 kt</td>
<td>Klickitat</td>
</tr>
<tr>
<td>37.248</td>
<td>-116.481</td>
<td>1878</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Kloster</td>
</tr>
<tr>
<td>37.032</td>
<td>-116.012</td>
<td>1190</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Knife A</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.034</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Knife B</td>
</tr>
<tr>
<td>37.117</td>
<td>-115.994</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Knox</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.036</td>
<td>- - -</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Koochotan</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Kootanai</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.128</td>
<td>1363</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kryddost</td>
</tr>
<tr>
<td>37.159</td>
<td>-116.069</td>
<td>1296</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kyack-A</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.067</td>
<td>1293</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Kyack-B</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.090</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Laban</td>
</tr>
<tr>
<td>37.164</td>
<td>-116.040</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>25 kt</td>
<td>Labis</td>
</tr>
<tr>
<td>37.300</td>
<td>-116.308</td>
<td>2100</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Labquark</td>
</tr>
<tr>
<td>37.180</td>
<td>-116.054</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Lagoon</td>
</tr>
<tr>
<td>37.022</td>
<td>-116.024</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Laguna</td>
</tr>
<tr>
<td>37.092</td>
<td>-116.020</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Lampblack</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.059</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Lanpher</td>
</tr>
<tr>
<td>37.032</td>
<td>-115.988</td>
<td>1220</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>1.37 Mt</td>
<td>Koa</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.054</td>
<td>1243</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>0.5 tons</td>
<td>Lassen</td>
</tr>
<tr>
<td>37.008</td>
<td>-116.059</td>
<td>1191</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Latir</td>
</tr>
<tr>
<td>37.163</td>
<td>-116.075</td>
<td>1310</td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>1.4 kt</td>
<td>Lea</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.020</td>
<td>1303</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Ledoux</td>
</tr>
<tr>
<td>37.103</td>
<td>-116.021</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Lexington</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.033</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Leyden</td>
</tr>
<tr>
<td>37.150</td>
<td>-116.083</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Liptauer</td>
</tr>
<tr>
<td>37.228</td>
<td>-116.376</td>
<td>2045</td>
<td>Surface</td>
<td>Weapons Effects</td>
<td>Low</td>
<td>Little Feller I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Effects</td>
<td>Low</td>
<td>Little Feller II</td>
</tr>
</tbody>
</table>

**July 1945 through September 1992**
<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date (mm/dd/yyyy)</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logan</td>
<td>10/16/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12e.02</td>
<td>06:00:00.14</td>
</tr>
<tr>
<td>Long Shot</td>
<td>10/29/1965</td>
<td>LANL/DoD</td>
<td>Amchitka, Alaska</td>
<td>-</td>
<td>21:00:00.08</td>
</tr>
<tr>
<td>Longchamps</td>
<td>04/19/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dm</td>
<td>16:32:00.16</td>
</tr>
<tr>
<td>Lovage</td>
<td>12/17/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fe</td>
<td>15:15:00.04</td>
</tr>
<tr>
<td>Lowball</td>
<td>07/12/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7av</td>
<td>17:00:00.08</td>
</tr>
<tr>
<td>Lubbock</td>
<td>10/18/1991</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mt</td>
<td>19:12:00.00</td>
</tr>
<tr>
<td>Luna</td>
<td>09/21/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3m</td>
<td>19:00:00.00</td>
</tr>
<tr>
<td>Mackerel</td>
<td>02/18/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U4b</td>
<td>15:37:37.12</td>
</tr>
<tr>
<td>Mad</td>
<td>12/13/1961</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9a</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Madison</td>
<td>12/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12g.01</td>
<td>17:25:00.12</td>
</tr>
<tr>
<td>Magnolia</td>
<td>05/26/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mallet</td>
<td>01/31/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fv</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Manatee</td>
<td>12/14/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9af</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Manteca</td>
<td>12/10/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4al</td>
<td>15:20:00.09</td>
</tr>
<tr>
<td>Manzanas</td>
<td>05/21/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gr</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Maple</td>
<td>06/10/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Maribo</td>
<td>06/26/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cs</td>
<td>18:03:00.08</td>
</tr>
<tr>
<td>Mars</td>
<td>09/28/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12f.02</td>
<td>00:00:00.00</td>
</tr>
<tr>
<td>Marsh</td>
<td>09/06/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gr</td>
<td>17:00:00.11</td>
</tr>
<tr>
<td>Marshmallow</td>
<td>06/28/1962</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U16a</td>
<td>17:00:00.11</td>
</tr>
<tr>
<td>Marsilly</td>
<td>04/05/1977</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2el</td>
<td>15:00:00.17</td>
</tr>
<tr>
<td>Marvel</td>
<td>09/21/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ds1</td>
<td>20:45:00.00</td>
</tr>
<tr>
<td>Mast</td>
<td>06/19/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U19u</td>
<td>13:00:00.09</td>
</tr>
<tr>
<td>Mataco</td>
<td>06/14/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bk</td>
<td>14:10:00.13</td>
</tr>
<tr>
<td>Mauve</td>
<td>08/06/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dp</td>
<td>17:23:30.04</td>
</tr>
<tr>
<td>Maxwell</td>
<td>01/13/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9br</td>
<td>15:37:43.10</td>
</tr>
<tr>
<td>Mazama</td>
<td>10/29/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td>18:30:00.10</td>
</tr>
<tr>
<td>Memory</td>
<td>03/14/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kq</td>
<td>22:00:00.00</td>
</tr>
<tr>
<td>Mercury</td>
<td>09/23/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12f.01</td>
<td>15:20:00.16</td>
</tr>
<tr>
<td>Merida</td>
<td>06/07/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dn</td>
<td>17:30:00.04</td>
</tr>
<tr>
<td>Merlin</td>
<td>02/16/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cb</td>
<td>16:00:00.15</td>
</tr>
<tr>
<td>Merrimac</td>
<td>07/13/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3gu</td>
<td>15:10:00.04</td>
</tr>
<tr>
<td>Mescalero</td>
<td>01/05/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3md</td>
<td>13:30:00.04</td>
</tr>
<tr>
<td>Mesilla</td>
<td>05/09/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mesita</td>
<td>05/09/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jd</td>
<td>16:00:00.08</td>
</tr>
<tr>
<td>MET (Military Effects Test)</td>
<td>04/15/1955</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 5</td>
<td>17:00:00.11</td>
</tr>
<tr>
<td>Metropolis</td>
<td>03/10/1990</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gl</td>
<td>16:00:00.08</td>
</tr>
<tr>
<td>Mickey</td>
<td>05/10/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U7m</td>
<td>13:40:00.04</td>
</tr>
<tr>
<td>Midas Myth/Milagro</td>
<td>02/15/1984</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12f.04</td>
<td>17:00:00.11</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.184</td>
<td>-116.202</td>
<td>- - -</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>5 kt</td>
</tr>
<tr>
<td>51.424</td>
<td>179.179</td>
<td>42</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>80 kt</td>
</tr>
<tr>
<td>37.122</td>
<td>-116.085</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.007</td>
<td>-116.024</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.079</td>
<td>-116.045</td>
<td>1225</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.063</td>
<td>-116.046</td>
<td>1213</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>1.5 tons</td>
</tr>
<tr>
<td>37.096</td>
<td>-116.052</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.050</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>500 tons</td>
</tr>
<tr>
<td>37.172</td>
<td>-116.203</td>
<td>2252</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.010</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.080</td>
<td>-116.073</td>
<td>1236</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-115.993</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.123</td>
<td>1352</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.193</td>
<td>-116.201</td>
<td>2021</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>13 tons</td>
</tr>
<tr>
<td>37.024</td>
<td>-116.029</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.009</td>
<td>-116.202</td>
<td>2241</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Low</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.063</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.039</td>
<td>1288</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>2.2 kt</td>
</tr>
<tr>
<td>37.350</td>
<td>-116.321</td>
<td>2068</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.019</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.018</td>
<td>-116.041</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.028</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.028</td>
<td>-116.041</td>
<td>1190</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.121</td>
<td>2021</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>Slight</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.086</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.052</td>
<td>-116.025</td>
<td>1203</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10.1 kt</td>
</tr>
<tr>
<td>37.055</td>
<td>-116.034</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.030</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.006</td>
<td>-116.017</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.112</td>
<td>-116.056</td>
<td>1246</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.078</td>
<td>-115.996</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.221</td>
<td>-116.182</td>
<td>2044</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------</td>
<td>-------------</td>
<td>----------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Middle Note</td>
<td>03/18/1987</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.21</td>
<td>18:28:00.09</td>
</tr>
<tr>
<td>Midi Mist</td>
<td>06/26/1967</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.02</td>
<td>16:00:00.08</td>
</tr>
<tr>
<td>Midland</td>
<td>07/16/1987</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7by</td>
<td>19:00:00.08</td>
</tr>
<tr>
<td>Miera</td>
<td>03/08/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ad</td>
<td>16:10:00.19</td>
</tr>
<tr>
<td>Mighty Oak</td>
<td>04/10/1986</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.08</td>
<td>14:08:30.10</td>
</tr>
<tr>
<td>Mighty Epic</td>
<td>05/12/1976</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.10</td>
<td>19:50:00.17</td>
</tr>
<tr>
<td>Mike</td>
<td>10/31/1952</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Milk Shake</td>
<td>03/25/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U5k</td>
<td>18:44:27.04</td>
</tr>
<tr>
<td>Mirow</td>
<td>10/02/1969</td>
<td>LANL</td>
<td>Amchitka, Alaska</td>
<td>- - -</td>
<td>22:06:00.04</td>
</tr>
<tr>
<td>Mineral Quarry</td>
<td>07/25/1990</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.22</td>
<td>15:00:00.06</td>
</tr>
<tr>
<td>Minero</td>
<td>12/20/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lt</td>
<td>16:20:00.11</td>
</tr>
<tr>
<td>Miners Iron</td>
<td>10/31/1980</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.11</td>
<td>18:00:00.09</td>
</tr>
<tr>
<td>Ming Vase</td>
<td>11/20/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U16a.04</td>
<td>18:00:00.03</td>
</tr>
<tr>
<td>Ming Blade</td>
<td>06/19/1974</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.08</td>
<td>16:00:00.08</td>
</tr>
<tr>
<td>Mini Jade</td>
<td>05/26/1983</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.12</td>
<td>14:30:00.09</td>
</tr>
<tr>
<td>Miniata</td>
<td>07/08/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bu</td>
<td>14:00:00.08</td>
</tr>
<tr>
<td>Mink</td>
<td>10/29/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ae</td>
<td>18:30:00.13</td>
</tr>
<tr>
<td>Minnow</td>
<td>05/15/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cv</td>
<td>16:15:00.12</td>
</tr>
<tr>
<td>Mint Leaf</td>
<td>05/05/1970</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.01</td>
<td>15:30:00.17</td>
</tr>
<tr>
<td>Minute Steak</td>
<td>09/12/1969</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11f</td>
<td>18:02:20.42</td>
</tr>
<tr>
<td>Mission Ghost</td>
<td>06/20/1987</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12t.09</td>
<td>16:00:00.18</td>
</tr>
<tr>
<td>Mission Cyber</td>
<td>12/02/1987</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12p.02</td>
<td>16:30:00.08</td>
</tr>
<tr>
<td>Mississippi</td>
<td>10/05/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ad</td>
<td>17:00:00.16</td>
</tr>
<tr>
<td>Misty Echo</td>
<td>12/10/1988</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12n.23</td>
<td>20:30:00.06</td>
</tr>
<tr>
<td>Misty North</td>
<td>05/02/1972</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.05</td>
<td>19:15:00.04</td>
</tr>
<tr>
<td>Misty Rain</td>
<td>04/06/1985</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.17</td>
<td>23:15:00.09</td>
</tr>
<tr>
<td>Mizzen</td>
<td>06/03/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ah</td>
<td>14:40:00.11</td>
</tr>
<tr>
<td>Moa</td>
<td>09/01/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ed</td>
<td>20:08:00.04</td>
</tr>
<tr>
<td>Mogollon</td>
<td>04/20/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U3li</td>
<td>15:12:30.07</td>
</tr>
<tr>
<td>Mohawk</td>
<td>07/02/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Molbo</td>
<td>02/12/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ag</td>
<td>14:55:00.08</td>
</tr>
<tr>
<td>Monahans-A</td>
<td>11/09/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lk</td>
<td>20:15:00.08</td>
</tr>
<tr>
<td>Monahans-B</td>
<td>11/09/1988</td>
<td>LANL</td>
<td>NTS</td>
<td>U6i</td>
<td>20:15:00.08</td>
</tr>
<tr>
<td>Monero</td>
<td>05/19/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jq</td>
<td>17:00:00.05</td>
</tr>
<tr>
<td>Montello</td>
<td>04/16/1991</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bf</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Monterey</td>
<td>07/29/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4aj</td>
<td>20:05:00.08</td>
</tr>
<tr>
<td>Mora</td>
<td>09/29/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Morgan</td>
<td>10/07/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Longitude</td>
<td>Surface Elevation</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>37.210</td>
<td>-116.209</td>
<td>2223</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.202</td>
<td>-116.209</td>
<td>2200</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.024</td>
<td>1284</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.028</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.218</td>
<td>-116.184</td>
<td>2084</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.209</td>
<td>-116.213</td>
<td>2224</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.104</td>
<td>-116.024</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.218</td>
<td>-116.184</td>
<td>2084</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.046</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.211</td>
<td>-116.206</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.010</td>
<td>-116.207</td>
<td>1931</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.210</td>
<td>-116.208</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.209</td>
<td>-116.206</td>
<td>1828</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.110</td>
<td>-116.052</td>
<td>1247</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>83 kt</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.032</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.013</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.216</td>
<td>-116.185</td>
<td>2094</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.877</td>
<td>-115.929</td>
<td>1007</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.220</td>
<td>-116.179</td>
<td>2017</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.235</td>
<td>-116.164</td>
<td>1926</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.139</td>
<td>-116.051</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>115 kt</td>
</tr>
<tr>
<td>37.199</td>
<td>-116.210</td>
<td>2322</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.208</td>
<td>-116.210</td>
<td>2199</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.201</td>
<td>-116.208</td>
<td>2212</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.095</td>
<td>-116.037</td>
<td>1247</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.015</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.047</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.224</td>
<td>-116.464</td>
<td>1873</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.991</td>
<td>-116.022</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.989</td>
<td>-116.022</td>
<td>1174</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.065</td>
<td>-116.003</td>
<td>1245</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.245</td>
<td>-116.443</td>
<td>1961</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.102</td>
<td>-116.076</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>Balloon</td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>2 kt</td>
</tr>
<tr>
<td>Balloon</td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>8 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Morrones</td>
<td>05/21/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ei</td>
<td>14:15:00.03</td>
</tr>
<tr>
<td>Moth</td>
<td>02/22/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td></td>
</tr>
<tr>
<td>Mudpack</td>
<td>12/16/1964</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U19e</td>
<td>19:15:00.16</td>
</tr>
<tr>
<td>Muenster</td>
<td>01/03/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3ls</td>
<td>16:00:00.11</td>
</tr>
<tr>
<td>Muggins</td>
<td>12/09/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bk</td>
<td>20:20:00.12</td>
</tr>
<tr>
<td>Muñeco</td>
<td>10/17/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ag</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Mundo</td>
<td>05/01/1984</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U7bo</td>
<td>19:05:00.09</td>
</tr>
<tr>
<td>Muscovy</td>
<td>04/23/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dx</td>
<td>21:44:00.04</td>
</tr>
<tr>
<td>Mushroom</td>
<td>03/03/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ef</td>
<td>15:19:00.04</td>
</tr>
<tr>
<td>Muskegon</td>
<td>05/11/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Mustang</td>
<td>11/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9at</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Nama-Amarylis</td>
<td>08/05/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsxy31</td>
<td>18:07:45.20</td>
</tr>
<tr>
<td>Nama-Mephisto</td>
<td>08/05/1971</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsyz27</td>
<td>18:07:45.20</td>
</tr>
<tr>
<td>Nambe</td>
<td>05/27/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Nancy</td>
<td>03/24/1953</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 4</td>
<td></td>
</tr>
<tr>
<td>Narraguagus</td>
<td>09/27/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2f</td>
<td>17:30:00.15</td>
</tr>
<tr>
<td>Nash</td>
<td>01/19/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ce</td>
<td>16:45:00.14</td>
</tr>
<tr>
<td>Natches</td>
<td>08/23/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ak1</td>
<td>13:30:00.14</td>
</tr>
<tr>
<td>Natoma</td>
<td>04/05/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aw</td>
<td>14:50:00.16</td>
</tr>
<tr>
<td>Navajo</td>
<td>07/10/1956</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Navata</td>
<td>09/29/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lb</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Nebbiolo</td>
<td>06/24/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ae</td>
<td>14:15:00.09</td>
</tr>
<tr>
<td>Nectar</td>
<td>05/13/1954</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Neptune</td>
<td>10/14/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c03</td>
<td>18:00:00.00</td>
</tr>
<tr>
<td>Nessel</td>
<td>08/29/1979</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2ep</td>
<td>15:08:00.17</td>
</tr>
<tr>
<td>New Point</td>
<td>12/13/1966</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U11c</td>
<td>21:00:00.08</td>
</tr>
<tr>
<td>Newark</td>
<td>09/29/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10u</td>
<td>14:45:30.09</td>
</tr>
<tr>
<td>Newton</td>
<td>09/16/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Nightingale</td>
<td>06/22/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ey</td>
<td>14:00:00.08</td>
</tr>
<tr>
<td>Nipper</td>
<td>02/04/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gl</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Niza</td>
<td>07/10/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cr</td>
<td>14:00:00.10</td>
</tr>
<tr>
<td>Noggin</td>
<td>09/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bx</td>
<td>14:00:00.13</td>
</tr>
<tr>
<td>Noor</td>
<td>04/10/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2be</td>
<td>14:00:00.00</td>
</tr>
<tr>
<td>Norbo</td>
<td>03/08/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8c</td>
<td>15:35:00.09</td>
</tr>
<tr>
<td>Normanna</td>
<td>07/12/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10cb</td>
<td>14:00:00.09</td>
</tr>
<tr>
<td>Numbat</td>
<td>12/12/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bu</td>
<td>18:45:00.12</td>
</tr>
<tr>
<td>Nutmeg</td>
<td>05/21/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Oak</td>
<td>06/28/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>-----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>37.071</td>
<td>-116.014</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.068</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>2 kt</td>
</tr>
<tr>
<td>37.297</td>
<td>-116.334</td>
<td>2082</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.047</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.106</td>
<td>-116.014</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.131</td>
<td>-116.068</td>
<td>1275</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
</tr>
<tr>
<td>37.106</td>
<td>-116.023</td>
<td>1292</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.017</td>
<td>-115.996</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.039</td>
<td>-116.011</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.132</td>
<td>-116.048</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.145</td>
<td>-116.034</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.141</td>
<td>-116.032</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.074</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.144</td>
<td>-116.136</td>
<td>1425</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>39 kt</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.036</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.055</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.053</td>
<td>-116.021</td>
<td>1207</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>4.5 Mt</td>
</tr>
<tr>
<td>37.236</td>
<td>-116.371</td>
<td>2038</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.194</td>
<td>-116.201</td>
<td>2045</td>
<td>Tunnel</td>
<td>Safety Experience</td>
<td>1.69 Mt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.067</td>
<td>1260</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.877</td>
<td>-115.939</td>
<td>1003</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.047</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.073</td>
<td>1309</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>12 kt</td>
</tr>
<tr>
<td>37.003</td>
<td>-116.010</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.129</td>
<td>-116.035</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.136</td>
<td>-116.048</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.154</td>
<td>-116.080</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.180</td>
<td>-116.084</td>
<td>1349</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.192</td>
<td>-116.035</td>
<td>1315</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.016</td>
<td>1201</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.016</td>
<td>1201</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>25.1 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.016</td>
<td>1201</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>8.9 Mt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Oakland</td>
<td>04/04/1967 14:20:00.15</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bi</td>
<td>14:20:00.15</td>
</tr>
<tr>
<td>Oarlock</td>
<td>02/16/1977 17:53:00.07</td>
<td>LANL</td>
<td>NTS</td>
<td>U3km</td>
<td>17:53:00.07</td>
</tr>
<tr>
<td>Oberon</td>
<td>04/30/1975 15:00:01.90</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ag</td>
<td>15:00:01.90</td>
</tr>
<tr>
<td>Ocate</td>
<td>03/30/1972 21:00:00.08</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jp</td>
<td>21:00:00.08</td>
</tr>
<tr>
<td>Ochre</td>
<td>04/29/1966 13:33:00.04</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ec</td>
<td>13:33:00.04</td>
</tr>
<tr>
<td>Oconto</td>
<td>01/23/1964 16:00:00.15</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ay</td>
<td>16:00:00.15</td>
</tr>
<tr>
<td>Offshore</td>
<td>08/08/1979 15:00:00.11</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ks</td>
<td>15:00:00.11</td>
</tr>
<tr>
<td>Olive</td>
<td>07/22/1958 - - - -</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Onaja</td>
<td>03/30/1972 21:00:00.04</td>
<td>LANL</td>
<td>NTS</td>
<td>U3js</td>
<td>21:00:00.04</td>
</tr>
<tr>
<td>Orange</td>
<td>08/12/1958 - - - -</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Orkney</td>
<td>05/02/1984 13:50:00.09</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10be</td>
<td>13:50:00.09</td>
</tr>
<tr>
<td>Osage</td>
<td>06/16/1956 - - - -</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Oscuro</td>
<td>09/21/1972 15:30:00.19</td>
<td>LANL</td>
<td>NTS</td>
<td>U7z</td>
<td>15:30:00.19</td>
</tr>
<tr>
<td>Otero</td>
<td>09/12/1958 20:00:00.00</td>
<td>LANL</td>
<td>NTS</td>
<td>U3q</td>
<td>20:00:00.00</td>
</tr>
<tr>
<td>Otowi</td>
<td>06/22/1962 - - - -</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Owens</td>
<td>07/25/1957 - - - -</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ay</td>
<td>19:33:00.14</td>
</tr>
<tr>
<td>Paca</td>
<td>05/07/1962 19:00:00.07</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3ax</td>
<td>19:00:00.07</td>
</tr>
<tr>
<td>Packard</td>
<td>01/15/1969 16:09:30.14</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2u</td>
<td>16:09:30.14</td>
</tr>
<tr>
<td>Packrat</td>
<td>06/06/1962 17:00:00.12</td>
<td>LANL</td>
<td>NTS</td>
<td>U3aw</td>
<td>17:00:00.12</td>
</tr>
<tr>
<td>Paisano</td>
<td>04/24/1963 16:09:30.14</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9w1</td>
<td>16:09:30.14</td>
</tr>
<tr>
<td>Pajara</td>
<td>12/12/1973 19:00:00.10</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ji</td>
<td>19:00:00.10</td>
</tr>
<tr>
<td>Palanquin</td>
<td>04/14/1965 13:14:00.10</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20k</td>
<td>13:14:00.10</td>
</tr>
<tr>
<td>Palisade-1</td>
<td>05/15/1989 13:10:00.09</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
<td>13:10:00.09</td>
</tr>
<tr>
<td>Palisade-2</td>
<td>05/15/1989 13:10:00.09</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
<td>13:10:00.09</td>
</tr>
<tr>
<td>Palisade-3</td>
<td>05/15/1989 13:10:00.09</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4at</td>
<td>13:10:00.09</td>
</tr>
<tr>
<td>Paliza</td>
<td>10/01/1981 19:00:00.10</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bd</td>
<td>19:00:00.10</td>
</tr>
<tr>
<td>Pamlico</td>
<td>07/11/1962 - - - -</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Pampas</td>
<td>03/01/1962 19:10:00.09</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3al</td>
<td>19:10:00.09</td>
</tr>
<tr>
<td>Panamint</td>
<td>05/21/1966 13:59:00.08</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gb</td>
<td>13:59:00.08</td>
</tr>
<tr>
<td>Panchuela</td>
<td>06/30/1987 16:05:00.10</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3mg</td>
<td>16:05:00.10</td>
</tr>
<tr>
<td>Panir</td>
<td>08/31/1978 14:00:00.16</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ys</td>
<td>14:00:00.16</td>
</tr>
<tr>
<td>Par</td>
<td>10/09/1964 14:00:00.12</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2p</td>
<td>14:00:00.12</td>
</tr>
<tr>
<td>Parnassia</td>
<td>11/30/1971 15:45:00.15</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bc</td>
<td>15:45:00.15</td>
</tr>
<tr>
<td>Parrot</td>
<td>12/16/1964 20:00:00.04</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dk</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Pascal-A</td>
<td>07/26/1957 08:00:00.00</td>
<td>LANL</td>
<td>NTS</td>
<td>U3j</td>
<td>08:00:00.00</td>
</tr>
<tr>
<td>Pascal-B</td>
<td>08/27/1957 22:35:00.00</td>
<td>LANL</td>
<td>NTS</td>
<td>U3d</td>
<td>22:35:00.00</td>
</tr>
<tr>
<td>Pascal-C</td>
<td>12/06/1957 22:15:00.00</td>
<td>LANL</td>
<td>NTS</td>
<td>U3e</td>
<td>22:15:00.00</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.162</td>
<td>-116.083</td>
<td>1321</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.029</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.109</td>
<td>-116.030</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.004</td>
<td>-116.016</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.023</td>
<td>1196</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.037</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>10.5 kt</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.009</td>
<td>1182</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>202 kt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.005</td>
<td>-116.021</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>3.8 Mt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.116</td>
<td>-116.024</td>
<td>1294</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.198</td>
<td>-116.055</td>
<td>1351</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>1.7 kt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.082</td>
<td>-116.037</td>
<td>1225</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.033</td>
<td>1202</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>38 tons</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>81.5 kt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>9.7 kt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.047</td>
<td>-116.026</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.148</td>
<td>-116.067</td>
<td>1288</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>10 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.040</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.037</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>36.991</td>
<td>-116.025</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.280</td>
<td>-116.524</td>
<td>1861</td>
<td>Crater</td>
<td>Plowshare</td>
<td>4.3 kt</td>
</tr>
<tr>
<td>37.108</td>
<td>-116.122</td>
<td>1338</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.108</td>
<td>-116.122</td>
<td>1338</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.108</td>
<td>-116.122</td>
<td>1338</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.082</td>
<td>-116.010</td>
<td>1260</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>3.88 Mt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.041</td>
<td>-116.030</td>
<td>1196</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>9.5 kt</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.061</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>36.999</td>
<td>-116.044</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.276</td>
<td>-116.358</td>
<td>2013</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.151</td>
<td>-116.078</td>
<td>1304</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>38 kt</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.071</td>
<td>1302</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.035</td>
<td>-116.013</td>
<td>1192</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.3 kt</td>
</tr>
<tr>
<td>37.052</td>
<td>-116.034</td>
<td>1202</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Slight</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.035</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Slight</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.032</td>
<td>1202</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Slight</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>-----------</td>
<td>----------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>Passaic</td>
<td>04/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9l</td>
<td>18:00:00.16</td>
</tr>
<tr>
<td>Peba</td>
<td>09/20/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bb</td>
<td>17:00:00.12</td>
</tr>
<tr>
<td>Pedernal</td>
<td>09/29/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hg</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Pekan</td>
<td>08/12/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bw</td>
<td>23:45:00.13</td>
</tr>
<tr>
<td>Penasco</td>
<td>11/19/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hl</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Pepato</td>
<td>06/11/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ad</td>
<td>14:00:00.17</td>
</tr>
<tr>
<td>Pera</td>
<td>09/08/1979</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bd</td>
<td>17:02:00.09</td>
</tr>
<tr>
<td>Persimmon</td>
<td>02/23/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dn</td>
<td>18:34:00.04</td>
</tr>
<tr>
<td>Petit</td>
<td>06/19/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Petrel</td>
<td>06/11/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dy</td>
<td>19:45:00.04</td>
</tr>
<tr>
<td>Piccalilli</td>
<td>11/21/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fc</td>
<td>14:52:00.04</td>
</tr>
<tr>
<td>Pike</td>
<td>3/13/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cy</td>
<td>16:02:00.12</td>
</tr>
<tr>
<td>Pile Driver</td>
<td>06/02/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U15a.01</td>
<td>15:30:00.09</td>
</tr>
<tr>
<td>Pin Stripe</td>
<td>04/25/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U11b</td>
<td>18:38:00.14</td>
</tr>
<tr>
<td>Pine</td>
<td>07/26/1958</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Pineau</td>
<td>07/16/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ao</td>
<td>15:00:00.10</td>
</tr>
<tr>
<td>Pinedrops-Bayou</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
<td>15:38:00.17</td>
</tr>
<tr>
<td>Pinedrops-Sloat</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
<td>15:38:00.17</td>
</tr>
<tr>
<td>Pinedrops-Tawny</td>
<td>01/10/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10as</td>
<td>15:38:00.17</td>
</tr>
<tr>
<td>Pipefish</td>
<td>04/29/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3co</td>
<td>20:47:00.12</td>
</tr>
<tr>
<td>Pipkin</td>
<td>10/08/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20b</td>
<td>14:30:00.14</td>
</tr>
<tr>
<td>Piranha</td>
<td>05/13/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7e</td>
<td>13:30:00.04</td>
</tr>
<tr>
<td>Pisonia</td>
<td>07/17/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Piton-A</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsy30</td>
<td>12:00:00.16</td>
</tr>
<tr>
<td>Piton-B</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx27</td>
<td>12:00:00.16</td>
</tr>
<tr>
<td>Piton-C</td>
<td>05/28/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsaa25</td>
<td>11:45:00.20</td>
</tr>
<tr>
<td>Plaid II</td>
<td>02/03/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2r</td>
<td>18:17:37.10</td>
</tr>
<tr>
<td>Planer</td>
<td>11/21/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3el</td>
<td>14:52:00.08</td>
</tr>
<tr>
<td>Platte</td>
<td>04/14/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12k.01</td>
<td>18:00:00.13</td>
</tr>
<tr>
<td>Platypus</td>
<td>02/24/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ad</td>
<td>16:30:00.13</td>
</tr>
<tr>
<td>Player</td>
<td>08/27/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cc</td>
<td>14:30:00.15</td>
</tr>
<tr>
<td>Pleasant</td>
<td>05/29/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ah</td>
<td>15:03:30.16</td>
</tr>
<tr>
<td>Pliers</td>
<td>08/27/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gn</td>
<td>13:45:00.04</td>
</tr>
<tr>
<td>Plomo</td>
<td>05/01/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ff</td>
<td>14:02:00.21</td>
</tr>
<tr>
<td>Pod-A</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ch</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Pod-B</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ci</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Pod-C</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cj</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Pod-D</td>
<td>10/29/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ck</td>
<td>20:00:00.04</td>
</tr>
<tr>
<td>Polka</td>
<td>12/06/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ai</td>
<td>13:00:00.00</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.045</td>
<td>1248</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.055</td>
<td>-116.030</td>
<td>1205</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.008</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.017</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.017</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.290</td>
<td>-116.456</td>
<td>1913</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.039</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.017</td>
<td>-116.017</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>2.2 kt</td>
</tr>
<tr>
<td>37.043</td>
<td>-116.018</td>
<td>1197</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.3 kt</td>
</tr>
<tr>
<td>37.031</td>
<td>-116.003</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.012</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.227</td>
<td>-116.056</td>
<td>1525</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>62 kt</td>
</tr>
<tr>
<td>36.887</td>
<td>-115.942</td>
<td>1066</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>2 Mt</td>
</tr>
<tr>
<td>37.089</td>
<td>-116.020</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.052</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.052</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.052</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.040</td>
<td>-116.028</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.257</td>
<td>-116.442</td>
<td>1965</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>37.087</td>
<td>-116.034</td>
<td>1237</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>255 kt</td>
</tr>
<tr>
<td>37.144</td>
<td>-116.033</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.141</td>
<td>-116.035</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.138</td>
<td>-116.031</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.070</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.024</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.222</td>
<td>-116.158</td>
<td>1695</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>1.85 kt</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.033</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.043</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.021</td>
<td>-116.039</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.031</td>
<td>-115.986</td>
<td>1227</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.131</td>
<td>1397</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>16.7 kt (Total)</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.143</td>
<td>1464</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td></td>
</tr>
<tr>
<td>37.136</td>
<td>-116.141</td>
<td>1448</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td></td>
</tr>
<tr>
<td>37.135</td>
<td>-116.137</td>
<td>1424</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td></td>
</tr>
<tr>
<td>37.159</td>
<td>-116.054</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>-------------</td>
<td>------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Polygonum</td>
<td>10/02/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2by</td>
<td>14:30:00.17</td>
</tr>
<tr>
<td>Pommard</td>
<td>03/14/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ee</td>
<td>15:19:00.06</td>
</tr>
<tr>
<td>Ponigee</td>
<td>07/22/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ah</td>
<td>13:21:08.11</td>
</tr>
<tr>
<td>Pool</td>
<td>09/27/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bv</td>
<td>14:15:00.08</td>
</tr>
<tr>
<td>Poplar</td>
<td>03/17/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U19p</td>
<td>14:15:00.09</td>
</tr>
<tr>
<td>Poplar</td>
<td>07/12/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Porteau</td>
<td>08/30/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ax</td>
<td>15:00:00.16</td>
</tr>
<tr>
<td>Portola</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bb</td>
<td>15:30:00.17</td>
</tr>
<tr>
<td>Portola-Larkin</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bb</td>
<td>15:30:00.16</td>
</tr>
<tr>
<td>Portulaca</td>
<td>06/28/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bv</td>
<td>19:15:12.40</td>
</tr>
<tr>
<td>Post</td>
<td>04/09/1955</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eb</td>
<td>15:13:00.16</td>
</tr>
<tr>
<td>Potrero</td>
<td>04/23/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7af</td>
<td>14:45:00.08</td>
</tr>
<tr>
<td>Potrillo</td>
<td>06/21/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3h</td>
<td>14:00:00.08</td>
</tr>
<tr>
<td>Pratt</td>
<td>09/25/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U6d</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Presidio</td>
<td>04/22/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bs</td>
<td>14:30:00.04</td>
</tr>
<tr>
<td>Priscilla</td>
<td>06/24/1957</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U3kg</td>
<td>15:00:00.90</td>
</tr>
<tr>
<td>Project 56 No. 1</td>
<td>11/01/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ds</td>
<td>19:00:00.04</td>
</tr>
<tr>
<td>Project 56 No. 2</td>
<td>11/03/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>U20v</td>
<td>13:45:00.04</td>
</tr>
<tr>
<td>Project 56 No. 3</td>
<td>11/05/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jl</td>
<td>14:00:00.11</td>
</tr>
<tr>
<td>Project 56 No. 4</td>
<td>01/18/1956</td>
<td>LANL</td>
<td>NTS</td>
<td>U7be</td>
<td>20:00:00.09</td>
</tr>
<tr>
<td>Project 57 No. 1</td>
<td>04/24/1957</td>
<td>LANL/DoD</td>
<td>NAFR</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Puce</td>
<td>06/10/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bs</td>
<td>14:30:00.04</td>
</tr>
<tr>
<td>Puddle</td>
<td>11/26/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kg</td>
<td>15:00:00.90</td>
</tr>
<tr>
<td>Purple</td>
<td>03/18/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ds</td>
<td>19:00:00.04</td>
</tr>
<tr>
<td>Purse</td>
<td>05/07/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20v</td>
<td>13:45:00.04</td>
</tr>
<tr>
<td>Puye</td>
<td>08/14/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jl</td>
<td>14:00:00.11</td>
</tr>
<tr>
<td>Pyramid</td>
<td>04/16/1980</td>
<td>LANL</td>
<td>NTS</td>
<td>U7be</td>
<td>20:00:00.09</td>
</tr>
<tr>
<td>Quargel</td>
<td>11/18/1978</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U2fb</td>
<td>19:00:00.17</td>
</tr>
<tr>
<td>Quay</td>
<td>10/10/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Queso</td>
<td>08/11/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10bf</td>
<td>15:00:00.00</td>
</tr>
<tr>
<td>Questa</td>
<td>05/04/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Quince</td>
<td>08/06/1958</td>
<td>LLNL/DoD</td>
<td>Enewetak</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Quinella</td>
<td>02/08/1979</td>
<td>LANL</td>
<td>NTS</td>
<td>U4l</td>
<td>20:00:00.09</td>
</tr>
<tr>
<td>Raccoon</td>
<td>06/01/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ajs</td>
<td>17:00:00.14</td>
</tr>
<tr>
<td>Rack</td>
<td>08/15/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ap</td>
<td>17:00:00.00</td>
</tr>
<tr>
<td>Rainier</td>
<td>09/19/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b</td>
<td>16:59:59.45</td>
</tr>
<tr>
<td>Randburg</td>
<td>07/25/1990</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n22a</td>
<td>15:00:00.00</td>
</tr>
<tr>
<td>Raritan</td>
<td>09/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9u</td>
<td>17:00:00.20</td>
</tr>
<tr>
<td>Ray</td>
<td>04/11/1953</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 4</td>
<td></td>
</tr>
</tbody>
</table>
## July 1945 through September 1992

<table>
<thead>
<tr>
<th>Latitude (degrees)</th>
<th>Longitude (degrees)</th>
<th>Surface Elevation (meters)</th>
<th>Type</th>
<th>Purpose</th>
<th>Yield Range</th>
<th>Detonation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.159</td>
<td>-116.074</td>
<td>1304</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Polygonum</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.012</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.5 kt</td>
<td>Pommard</td>
</tr>
<tr>
<td>37.132</td>
<td>-116.068</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Pongee</td>
</tr>
<tr>
<td>37.090</td>
<td>-116.003</td>
<td>1284</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Ponil</td>
</tr>
<tr>
<td>37.256</td>
<td>-116.329</td>
<td>2076</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 500 kt</td>
<td>Pool</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>9.3 Mt</td>
<td>Poplar</td>
</tr>
<tr>
<td>37.152</td>
<td>-116.084</td>
<td>1313</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Portmanteau</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.052</td>
<td>1285</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Portola</td>
</tr>
<tr>
<td>37.178</td>
<td>-116.052</td>
<td>1285</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Portola-Larkin</td>
</tr>
<tr>
<td>37.148</td>
<td>-116.087</td>
<td>1311</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Portulaca</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>2 kt</td>
<td>Post</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.077</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Potrero</td>
</tr>
<tr>
<td>37.092</td>
<td>-116.028</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Potrillo</td>
</tr>
<tr>
<td>37.012</td>
<td>-116.031</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Pratt</td>
</tr>
<tr>
<td>36.983</td>
<td>-116.005</td>
<td>1171</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Presidio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>37 kt</td>
<td>Priscilla</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Project 56 No. 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Project 56 No. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>No yield</td>
<td>Project 56 No. 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Very slight</td>
<td>Project 56 No. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Project 57 No. 1</td>
</tr>
<tr>
<td>37.059</td>
<td>-116.040</td>
<td>1208</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Puce</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.012</td>
<td>1169</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Puddle</td>
</tr>
<tr>
<td>37.009</td>
<td>-116.010</td>
<td>1180</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Purple</td>
</tr>
<tr>
<td>37.283</td>
<td>-116.502</td>
<td>1828</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Purse</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.037</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Puye</td>
</tr>
<tr>
<td>37.101</td>
<td>-116.031</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Pyramid</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.085</td>
<td>1275</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Quargel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>79 tons</td>
<td>Quay</td>
</tr>
<tr>
<td>37.190</td>
<td>-116.049</td>
<td>1310</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Queso</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>670 kt</td>
<td>Questa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>Zero</td>
<td>Quince</td>
</tr>
<tr>
<td>37.102</td>
<td>-116.056</td>
<td>1241</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Quinella</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.035</td>
<td>1199</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Raccoon</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.049</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rack</td>
</tr>
<tr>
<td>37.196</td>
<td>-116.204</td>
<td>- - - -</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>1.7 kt</td>
<td>Rainier</td>
</tr>
<tr>
<td>37.207</td>
<td>-116.215</td>
<td>2216</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Randsburg</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.046</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Raritan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>200 tons</td>
<td>Ray</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Reblochon</td>
<td>02/23/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2en</td>
<td>17:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Red Hot</td>
<td>03/05/1966</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U12g.06</td>
<td>18:15:00.10</td>
<td></td>
</tr>
<tr>
<td>Redmud</td>
<td>12/08/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ab</td>
<td>14:49:30.08</td>
<td></td>
</tr>
<tr>
<td>Redwood</td>
<td>06/27/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Reo</td>
<td>01/22/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10m</td>
<td>15:17:19.10</td>
<td></td>
</tr>
<tr>
<td>Rex</td>
<td>02/24/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20h(e)</td>
<td>15:55:07.04</td>
<td></td>
</tr>
<tr>
<td>Rhyolite</td>
<td>06/22/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ey</td>
<td>14:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Rib</td>
<td>12/14/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jv</td>
<td>15:00:00.17</td>
<td></td>
</tr>
<tr>
<td>Rickey</td>
<td>06/15/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U19c</td>
<td>13:59:59.97</td>
<td></td>
</tr>
<tr>
<td>Rinconada</td>
<td>06/15/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Ringtail</td>
<td>12/17/1961</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ak</td>
<td>16:35:00.13</td>
<td></td>
</tr>
<tr>
<td>Rio Arriba</td>
<td>10/18/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 3</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-1</strong></td>
<td>05/17/1973</td>
<td>LLNL</td>
<td>Rifle, Colorado</td>
<td>- - -</td>
<td>16:00:00.12</td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-2</strong></td>
<td>05/17/1973</td>
<td>LLNL</td>
<td>Rifle, Colorado</td>
<td>- - -</td>
<td>16:00:00.12</td>
<td></td>
</tr>
<tr>
<td><strong>Rio Blanco-3</strong></td>
<td>05/17/1973</td>
<td>LLNL</td>
<td>Rifle, Colorado</td>
<td>- - -</td>
<td>16:00:00.12</td>
<td></td>
</tr>
<tr>
<td>Riola</td>
<td>09/25/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eq</td>
<td>15:26:30.08</td>
<td></td>
</tr>
<tr>
<td>Rivet I</td>
<td>01/18/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aa</td>
<td>14:55:00.00</td>
<td></td>
</tr>
<tr>
<td>Rivet II</td>
<td>01/26/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10z</td>
<td>16:30:00.00</td>
<td></td>
</tr>
<tr>
<td>Rivet III</td>
<td>03/02/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10y</td>
<td>15:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Rivoli</td>
<td>05/20/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2eg</td>
<td>17:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Roanoke</td>
<td>10/12/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9q</td>
<td>15:00:00.16</td>
<td></td>
</tr>
<tr>
<td>Romano</td>
<td>12/16/1983</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ex</td>
<td>18:30:00.09</td>
<td></td>
</tr>
<tr>
<td>Romeo</td>
<td>03/26/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Roquefort</td>
<td>10/16/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4as</td>
<td>21:35:00.09</td>
<td></td>
</tr>
<tr>
<td>Rose</td>
<td>06/02/1958</td>
<td>LANL</td>
<td>Eniwetak</td>
<td>- - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Rousanne</td>
<td>11/12/1981</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U4p</td>
<td>15:00:00.10</td>
<td></td>
</tr>
<tr>
<td>Rovena</td>
<td>08/10/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10s</td>
<td>13:16:00.07</td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>12/28/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U7aj(s)</td>
<td>18:00:00.08</td>
<td></td>
</tr>
<tr>
<td><strong>Ruslison</strong></td>
<td>09/10/1969</td>
<td>LANL</td>
<td>Grand Valley, Colorado</td>
<td>- - -</td>
<td>21:00:00.01</td>
<td></td>
</tr>
<tr>
<td>Rummy</td>
<td>09/27/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7au</td>
<td>17:20:00.08</td>
<td></td>
</tr>
<tr>
<td>Rushmore</td>
<td>10/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Russet</td>
<td>03/05/1968</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>U6a</td>
<td>15:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Ruth</td>
<td>03/31/1953</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 7</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Sabado</td>
<td>08/11/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lc</td>
<td>14:00:00.12</td>
<td></td>
</tr>
<tr>
<td>Sacramento</td>
<td>06/30/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9v</td>
<td>21:30:00.16</td>
<td></td>
</tr>
<tr>
<td><strong>Salmon</strong></td>
<td>10/22/1964</td>
<td>LLNL/DoD</td>
<td>Hattiesburg, Mississippi</td>
<td>- - -</td>
<td>16:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Salut</td>
<td>06/12/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ak</td>
<td>15:15:00.08</td>
<td></td>
</tr>
<tr>
<td>San Juan</td>
<td>10/20/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3p</td>
<td>14:30:00.00</td>
<td></td>
</tr>
<tr>
<td>Sandreef</td>
<td>11/09/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U7aq</td>
<td>22:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.065</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Reblochon</td>
</tr>
<tr>
<td>37.174</td>
<td>-116.209</td>
<td>2299</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Red Hot</td>
</tr>
<tr>
<td>37.079</td>
<td>-116.002</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Redmud</td>
</tr>
<tr>
<td>Barge</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>412 kt</td>
<td>Redwood</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.040</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Reo</td>
</tr>
<tr>
<td>37.272</td>
<td>-116.435</td>
<td>1971</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>19 kt</td>
<td>Rex</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.073</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
<td>Rhyolite</td>
</tr>
<tr>
<td>37.018</td>
<td>-116.019</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rib</td>
</tr>
<tr>
<td>37.265</td>
<td>-116.316</td>
<td>2116</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Rickey</td>
</tr>
<tr>
<td>Airdrop</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>800 kt</td>
<td>Rinconada</td>
</tr>
<tr>
<td>37.043</td>
<td>-116.026</td>
<td>1196</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Ringtail</td>
</tr>
<tr>
<td>Tower</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>90 tons</td>
<td>Rio Arriba</td>
</tr>
<tr>
<td>39.793</td>
<td>-108.368</td>
<td>2005</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>33 kt</td>
<td>Rio Blanco-1</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.065</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.07 kt</td>
<td>Riola</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.047</td>
<td>1276</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rivet I</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.049</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rivet II</td>
</tr>
<tr>
<td>37.166</td>
<td>-116.050</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rivet III</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.067</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rivoli</td>
</tr>
<tr>
<td>37.123</td>
<td>-116.052</td>
<td>1252</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Roanoke</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.073</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Romano</td>
</tr>
<tr>
<td>Barge</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>11 Mt</td>
<td>Romeo</td>
</tr>
<tr>
<td>37.110</td>
<td>-116.122</td>
<td>1341</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Roquefort</td>
</tr>
<tr>
<td>Barge</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>15 kt</td>
<td>Rose</td>
</tr>
<tr>
<td>37.108</td>
<td>-116.050</td>
<td>1243</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Rousanne</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.049</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Rovena</td>
</tr>
<tr>
<td>37.100</td>
<td>-116.037</td>
<td>1255</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Rudder</td>
</tr>
<tr>
<td>39.356</td>
<td>-107.949</td>
<td>2469</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>40 kt</td>
<td>Rulison</td>
</tr>
<tr>
<td>37.080</td>
<td>-116.052</td>
<td>1226</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Rummy</td>
</tr>
<tr>
<td>Balloon</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>188 tons</td>
<td>Rushmore</td>
</tr>
<tr>
<td>36.970</td>
<td>-116.057</td>
<td>1170</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Russet</td>
</tr>
<tr>
<td>Tower</td>
<td></td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>200 tons</td>
<td>Ruth</td>
</tr>
<tr>
<td>36.998</td>
<td>-116.004</td>
<td>1175</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sabado</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.048</td>
<td>1246</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Sacramento</td>
</tr>
<tr>
<td>31.142</td>
<td>-89.570</td>
<td>46</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>5.3 kt</td>
<td>Salmon</td>
</tr>
<tr>
<td>37.248</td>
<td>-116.490</td>
<td>1873</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Salut</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.033</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>San Juan</td>
</tr>
<tr>
<td>37.072</td>
<td>-116.051</td>
<td>1221</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Sandreef</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Sanford</td>
<td>10/26/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Fe</td>
<td>10/30/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santee</td>
<td>10/27/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10f</td>
<td>15:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Sapello</td>
<td>04/12/1974</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ge</td>
<td>15:15:00.08</td>
<td></td>
</tr>
<tr>
<td>Sappho</td>
<td>03/23/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dh2</td>
<td>18:50:00.16</td>
<td></td>
</tr>
<tr>
<td>Sardine</td>
<td>12/04/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ch</td>
<td>16:38:30.13</td>
<td></td>
</tr>
<tr>
<td>Satsop</td>
<td>08/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2g</td>
<td>13:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Saturn</td>
<td>08/10/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c</td>
<td>00:59:55.10</td>
<td></td>
</tr>
<tr>
<td>Satz</td>
<td>07/07/1978</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dq</td>
<td>14:00:00.17</td>
<td></td>
</tr>
<tr>
<td>Saxon</td>
<td>07/28/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cc</td>
<td>15:33:30.13</td>
<td></td>
</tr>
<tr>
<td>Sazerac</td>
<td>10/25/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fa</td>
<td>14:30:00.06</td>
<td></td>
</tr>
<tr>
<td>Scaevola</td>
<td>07/14/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scantling</td>
<td>08/19/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U4h</td>
<td>17:55:00.10</td>
<td></td>
</tr>
<tr>
<td>Scap</td>
<td>05/14/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3da(s)</td>
<td>17:32:36.23</td>
<td></td>
</tr>
<tr>
<td>Schellbourne</td>
<td>05/13/1988</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2gf</td>
<td>15:35:00.11</td>
<td></td>
</tr>
<tr>
<td>Schooner</td>
<td>12/08/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20u</td>
<td>16:00:00.14</td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>12/12/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gh</td>
<td>15:20:00.04</td>
<td></td>
</tr>
<tr>
<td>Scotch</td>
<td>05/23/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U19as</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Screamer</td>
<td>09/01/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dg</td>
<td>20:08:00.04</td>
<td></td>
</tr>
<tr>
<td>Scree-Acajou</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsx24</td>
<td>15:05:00.02</td>
<td></td>
</tr>
<tr>
<td>Scree-Alhambra</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz21</td>
<td>15:05:00.02</td>
<td></td>
</tr>
<tr>
<td>Scree-Chamois</td>
<td>10/13/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9itsz24</td>
<td>15:05:00.02</td>
<td></td>
</tr>
<tr>
<td>Scroll</td>
<td>04/23/1968</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U19n</td>
<td>17:01:30.08</td>
<td></td>
</tr>
<tr>
<td>Scupper</td>
<td>08/19/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hj</td>
<td>17:32:00.10</td>
<td></td>
</tr>
<tr>
<td>Scuttle</td>
<td>11/13/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bh</td>
<td>15:15:00.13</td>
<td></td>
</tr>
<tr>
<td>Seafoam</td>
<td>12/13/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ea</td>
<td>15:17:00.17</td>
<td></td>
</tr>
<tr>
<td>Seamount</td>
<td>11/17/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kp</td>
<td>19:30:00.08</td>
<td></td>
</tr>
<tr>
<td>Seaweed B</td>
<td>10/16/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkd</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Seaweed-C</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hke</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Seaweed-D</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkf</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Seaweed-E</td>
<td>10/01/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hkc</td>
<td>14:30:00.04</td>
<td></td>
</tr>
<tr>
<td>Seco</td>
<td>02/25/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8l</td>
<td>15:00:00.08</td>
<td></td>
</tr>
<tr>
<td>Sedan</td>
<td>07/06/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10h</td>
<td>17:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Seersucker</td>
<td>02/19/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bm</td>
<td>15:28:54.11</td>
<td></td>
</tr>
<tr>
<td>Seminole</td>
<td>06/06/1956</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sepia</td>
<td>11/12/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3en</td>
<td>18:00:00.05</td>
<td></td>
</tr>
<tr>
<td>Sequoia</td>
<td>07/01/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serena</td>
<td>07/25/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20an</td>
<td>14:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Serpa</td>
<td>12/17/1980</td>
<td>LLNL/UK</td>
<td>NTS</td>
<td>U19ai</td>
<td>15:10:00.09</td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Longitude</td>
<td>Surface Elevation</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>-------------------</td>
<td>----------</td>
<td>------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(degrees)</td>
<td>(degrees)</td>
<td>(meters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.149</td>
<td>-116.054</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>4.9 kt</td>
<td>Sanford</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>1.3 kt</td>
<td>Santa Fe</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.045</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Santee</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.082</td>
<td>1266</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sappho</td>
</tr>
<tr>
<td>37.040</td>
<td>-116.030</td>
<td>1194</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Sardine</td>
</tr>
<tr>
<td>37.154</td>
<td>-116.077</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Satsop</td>
</tr>
<tr>
<td>37.194</td>
<td>-116.034</td>
<td></td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Saturn</td>
</tr>
<tr>
<td>37.112</td>
<td>-116.078</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Satz</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.134</td>
<td>1411</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>1.2 kt</td>
<td>Saxon</td>
</tr>
<tr>
<td>37.032</td>
<td>-116.027</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sazerc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Safety Experiment</td>
<td>Zero</td>
<td>Scaevola</td>
</tr>
<tr>
<td>37.110</td>
<td>-116.055</td>
<td>1246</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Scantling</td>
</tr>
<tr>
<td>37.059</td>
<td>-116.011</td>
<td>1222</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Scaup</td>
</tr>
<tr>
<td>37.124</td>
<td>-116.073</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
<td>Schellbourne</td>
</tr>
<tr>
<td>37.343</td>
<td>-116.567</td>
<td>1668</td>
<td>Crater</td>
<td>Plowshare</td>
<td>30 kt</td>
<td>Schooner</td>
</tr>
<tr>
<td>37.004</td>
<td>-116.040</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Scissors</td>
</tr>
<tr>
<td>37.275</td>
<td>-116.371</td>
<td>2034</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>155 kt</td>
<td>Scotch</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.010</td>
<td>1184</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
<td>Screamer</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.035</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Scree-Acajou</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.032</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Scree-Alhambra</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.032</td>
<td>1275</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Scree-Chamois</td>
</tr>
<tr>
<td>37.338</td>
<td>-116.376</td>
<td>2032</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>Less than 20 kt</td>
<td>Scroll</td>
</tr>
<tr>
<td>37.018</td>
<td>-116.032</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Scupper</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.076</td>
<td>1312</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>1.7 kt</td>
<td>Scuttle</td>
</tr>
<tr>
<td>37.161</td>
<td>-116.074</td>
<td>1306</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Seafoam</td>
</tr>
<tr>
<td>37.021</td>
<td>-116.026</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Seamount</td>
</tr>
<tr>
<td>37.013</td>
<td>-115.999</td>
<td>1185</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Seaweed B</td>
</tr>
<tr>
<td>37.011</td>
<td>-115.999</td>
<td>1184</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Seaweed-C</td>
</tr>
<tr>
<td>37.010</td>
<td>-116.000</td>
<td>1183</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Seaweed-D</td>
</tr>
<tr>
<td>37.014</td>
<td>-115.999</td>
<td>1184</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Seaweed-E</td>
</tr>
<tr>
<td>37.182</td>
<td>-116.085</td>
<td>1356</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Seco</td>
</tr>
<tr>
<td>37.177</td>
<td>-116.046</td>
<td>1289</td>
<td>Crater</td>
<td>Plowshare</td>
<td>104 kt</td>
<td>Sedan</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.032</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Seersucker</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Related</td>
<td>13.7 kt</td>
<td>Seminole</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.023</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sepia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>5.2 kt</td>
<td>Sequoia</td>
</tr>
<tr>
<td>37.297</td>
<td>-116.439</td>
<td>1942</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Serena</td>
</tr>
<tr>
<td>37.325</td>
<td>-116.316</td>
<td>2028</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>20 to 150 kt</td>
<td>Serpa</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Sevilla</td>
<td>06/25/1968 LANL</td>
<td>NTS</td>
<td>U3fk</td>
<td>15:30:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seyval</td>
<td>11/12/1982 LANL</td>
<td>NTS</td>
<td>U3lm</td>
<td>19:17:00.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallows</td>
<td>02/26/1976 LANL</td>
<td>NTS</td>
<td>U3jf</td>
<td>14:50:00.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaper</td>
<td>03/23/1970 LLNL</td>
<td>NTS</td>
<td>U7r</td>
<td>23:05:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shasta</td>
<td>08/18/1957 LLNL</td>
<td>NTS</td>
<td>Area 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shave</td>
<td>01/22/1969 LANL</td>
<td>NTS</td>
<td>U3gk</td>
<td>15:00:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheephead</td>
<td>09/26/1979 LANL/DoD</td>
<td>Fallon, Nevada</td>
<td>U19aa</td>
<td>15:00:00.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoal</td>
<td>10/26/1963 LANL/DoD</td>
<td>NTS</td>
<td>U3ac</td>
<td>19:45:00.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrew</td>
<td>09/16/1961 LANL</td>
<td>NTS</td>
<td>U10t</td>
<td>14:00:00.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shuffle</td>
<td>04/18/1968 LLNL</td>
<td>NTS</td>
<td>U3ez</td>
<td>17:50:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidecar</td>
<td>12/13/1966 LANL</td>
<td>NTS</td>
<td>U3cj</td>
<td>18:35:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sienna</td>
<td>01/18/1966 LANL</td>
<td>NTS</td>
<td>U9ck</td>
<td>19:45:00.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silene</td>
<td>06/28/1973 LLNL</td>
<td>NTS</td>
<td>U10w</td>
<td>14:45:00.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simms</td>
<td>11/05/1966 LLNL</td>
<td>NTS</td>
<td>Area 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simon</td>
<td>04/25/1953 LLNL</td>
<td>NTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sled</td>
<td>08/29/1968 LANL</td>
<td>NTS</td>
<td>U19i</td>
<td>22:45:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Boy</td>
<td>07/14/1962 LANL/DoD</td>
<td>NTS</td>
<td>U3ev2s</td>
<td>14:30:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoky</td>
<td>08/31/1957 LLNL</td>
<td>NTS</td>
<td>U3ac</td>
<td>19:45:00.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snubber</td>
<td>04/21/1970 LANL</td>
<td>NTS</td>
<td>U3j</td>
<td>17:30:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socorro</td>
<td>10/22/1958 LANL</td>
<td>NTS</td>
<td>U9bd</td>
<td>14:00:00.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solano</td>
<td>08/09/1972 LANL</td>
<td>NTS</td>
<td>U3jc</td>
<td>13:31:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solanum</td>
<td>12/14/1972 LLNL</td>
<td>NTS</td>
<td>U9itsw24.5</td>
<td>15:30:00.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solendon</td>
<td>02/12/1964 LANL</td>
<td>NTS</td>
<td>U3cz</td>
<td>15:38:00.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spar</td>
<td>12/19/1973 LLNL</td>
<td>NTS</td>
<td>U2bp1</td>
<td>14:30:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider-A</td>
<td>08/14/1969 LLNL</td>
<td>NTS</td>
<td>U2bp2</td>
<td>14:30:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider-B</td>
<td>08/14/1969 LLNL</td>
<td>NTS</td>
<td>U9bd</td>
<td>14:00:00.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spoon</td>
<td>09/11/1964 LLNL</td>
<td>NTS</td>
<td>U3hc</td>
<td>14:58:00.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sprit</td>
<td>11/10/1976 LANL</td>
<td>NTS</td>
<td>U3fy</td>
<td>14:00:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spud</td>
<td>07/17/1968 LANL</td>
<td>NTS</td>
<td>U2b</td>
<td>18:00:00.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Lawrence</td>
<td>11/09/1962 LLNL</td>
<td>NTS</td>
<td>U10ah</td>
<td>15:00:00.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staccato</td>
<td>01/19/1968 LLNL</td>
<td>NTS</td>
<td>U10q</td>
<td>13:00:00.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanley</td>
<td>07/27/1967 LLNL</td>
<td>NTS</td>
<td>U2aw</td>
<td>15:05:00.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanyan</td>
<td>09/26/1974 LLNL</td>
<td>NTS</td>
<td>U2aw</td>
<td>15:05:00.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starfish Prime</td>
<td>07/09/1962 LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starwort</td>
<td>04/26/1973 LLNL</td>
<td>NTS</td>
<td>U2bs</td>
<td>17:15:00.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterling</td>
<td>12/03/1966 LLNL/DoD</td>
<td>Hattiesburg, Mississippi</td>
<td>- - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stillwater</td>
<td>02/08/1962 LLNL</td>
<td>NTS</td>
<td>U3fh</td>
<td>15:00:00.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stilt</td>
<td>12/15/1967 LANL</td>
<td>NTS</td>
<td>U20p</td>
<td>14:20:00.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------------</td>
<td>-----------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.042</td>
<td>-115.993</td>
<td>1226</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sevilla</td>
</tr>
<tr>
<td>37.024</td>
<td>-116.033</td>
<td>1187</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Seyval</td>
</tr>
<tr>
<td>37.028</td>
<td>-116.017</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Shallows</td>
</tr>
<tr>
<td>37.086</td>
<td>-116.022</td>
<td>1252</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Shaper</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>17 kt</td>
<td>Shasta</td>
</tr>
<tr>
<td>37.015</td>
<td>-115.995</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Shave</td>
</tr>
<tr>
<td>37.229</td>
<td>-116.365</td>
<td>2033</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Sheepshead</td>
</tr>
<tr>
<td>39.200</td>
<td>-118.381</td>
<td>1574</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>12 kt</td>
<td>Shoal</td>
</tr>
<tr>
<td>37.048</td>
<td>-116.034</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Shrew</td>
</tr>
<tr>
<td>37.152</td>
<td>-116.038</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Shuffle</td>
</tr>
<tr>
<td>37.035</td>
<td>-116.008</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sidecar</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.019</td>
<td>1193</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sienna</td>
</tr>
<tr>
<td>37.115</td>
<td>-116.042</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Silene</td>
</tr>
<tr>
<td>37.170</td>
<td>-116.048</td>
<td>1279</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>2.3 kt</td>
<td>Simms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>43 kt</td>
<td>Simon</td>
</tr>
<tr>
<td>37.250</td>
<td>-116.348</td>
<td>2057</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Sled</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Effects</td>
<td>Low</td>
<td>Small Boy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>44 kt</td>
<td>Smoky</td>
</tr>
<tr>
<td>37.055</td>
<td>-115.989</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>12.7 kt</td>
<td>Snubber</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>6 kt</td>
<td>Socorro</td>
</tr>
<tr>
<td>37.003</td>
<td>-116.018</td>
<td>1179</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Solano</td>
</tr>
<tr>
<td>37.138</td>
<td>-116.036</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Solanum</td>
</tr>
<tr>
<td>37.057</td>
<td>-116.030</td>
<td>1206</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Solendon</td>
</tr>
<tr>
<td>37.006</td>
<td>-116.020</td>
<td>1180</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Spar</td>
</tr>
<tr>
<td>37.160</td>
<td>-116.064</td>
<td>1292</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Spider-A</td>
</tr>
<tr>
<td>37.158</td>
<td>-116.065</td>
<td>1291</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Spider-B</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.026</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Spoon</td>
</tr>
<tr>
<td>37.036</td>
<td>-116.018</td>
<td>1192</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sprit</td>
</tr>
<tr>
<td>37.001</td>
<td>-116.000</td>
<td>1178</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Spud</td>
</tr>
<tr>
<td>37.164</td>
<td>-116.074</td>
<td>1309</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>St. Lawrence</td>
</tr>
<tr>
<td>37.156</td>
<td>-116.055</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Staccato</td>
</tr>
<tr>
<td>37.149</td>
<td>-116.049</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Stanley</td>
</tr>
<tr>
<td>37.133</td>
<td>-116.069</td>
<td>1275</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Stanyan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rocket</td>
<td>Weapons Effects</td>
<td>1.4 Mt</td>
<td>Starfish Prime</td>
</tr>
<tr>
<td>37.123</td>
<td>-116.059</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>90 kt</td>
<td>Starwort</td>
</tr>
<tr>
<td>31.142</td>
<td>-89.570</td>
<td>46</td>
<td>Shaft</td>
<td>Vela Uniform</td>
<td>380 tons</td>
<td>Sterling</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.054</td>
<td>1259</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3.07 kt</td>
<td>Stillwater</td>
</tr>
<tr>
<td>37.037</td>
<td>-116.003</td>
<td>1204</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Stilt</td>
</tr>
<tr>
<td>37.340</td>
<td>-116.524</td>
<td>1667</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Stilton</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Stinger</td>
<td>03/22/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U19l</td>
<td>15:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Stoat</td>
<td>01/09/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ap</td>
<td>16:30:00.14</td>
<td></td>
</tr>
<tr>
<td>Stoddard</td>
<td>09/17/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cms</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Stokes</td>
<td>08/07/1957</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stones</td>
<td>05/22/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U9ae</td>
<td>15:40:00.14</td>
<td></td>
</tr>
<tr>
<td>Strait</td>
<td>03/17/1976</td>
<td>LANL</td>
<td>NTS</td>
<td>U4a</td>
<td>14:45:00.09</td>
<td></td>
</tr>
<tr>
<td>Strake</td>
<td>08/04/1977</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ae</td>
<td>16:40:00.07</td>
<td></td>
</tr>
<tr>
<td>Sturgeon</td>
<td>04/15/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3bo</td>
<td>14:30:00.12</td>
<td></td>
</tr>
<tr>
<td>Stutz</td>
<td>04/06/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ca</td>
<td>13:57:17.10</td>
<td></td>
</tr>
<tr>
<td>Suede</td>
<td>03/20/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bk</td>
<td>15:30:49.10</td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>11/19/1951</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulky</td>
<td>12/18/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U18d</td>
<td>19:35:00.09</td>
<td></td>
</tr>
<tr>
<td>Sundown-A</td>
<td>09/20/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1d</td>
<td>16:15:00.00</td>
<td></td>
</tr>
<tr>
<td>Sundown-B</td>
<td>09/20/1990</td>
<td>LANL</td>
<td>NTS</td>
<td>U1d</td>
<td>16:15:00.00</td>
<td></td>
</tr>
<tr>
<td>Sunset</td>
<td>07/10/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sutter</td>
<td>12/21/1976</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bw</td>
<td>15:58:00.16</td>
<td></td>
</tr>
<tr>
<td>Swanee</td>
<td>05/14/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch</td>
<td>06/22/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bv</td>
<td>13:10:00.00</td>
<td></td>
</tr>
<tr>
<td>Swordfish</td>
<td>05/11/1962</td>
<td>LANL/DoD</td>
<td>Pacific</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sycamore</td>
<td>05/31/1958</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taji</td>
<td>07/25/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20ae</td>
<td>19:05:00.08</td>
<td></td>
</tr>
<tr>
<td>Tahoka</td>
<td>08/13/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3mf</td>
<td>14:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Tajique</td>
<td>06/28/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U7aa</td>
<td>16:30:00.07</td>
<td></td>
</tr>
<tr>
<td>Tajo</td>
<td>06/05/1986</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bl</td>
<td>15:04:00.06</td>
<td></td>
</tr>
<tr>
<td>Tamalpais</td>
<td>10/08/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.02</td>
<td>22:00:00.13</td>
<td></td>
</tr>
<tr>
<td>Tan</td>
<td>06/03/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U7k</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Tanana</td>
<td>05/25/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangerine</td>
<td>08/12/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U3eb</td>
<td>15:36:00.05</td>
<td></td>
</tr>
<tr>
<td>Tanya</td>
<td>07/30/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dt</td>
<td>13:00:00.00</td>
<td></td>
</tr>
<tr>
<td>Tapestry</td>
<td>05/12/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2an</td>
<td>19:37:26.20</td>
<td></td>
</tr>
<tr>
<td>Tapper</td>
<td>06/12/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3go</td>
<td>14:00:00.04</td>
<td></td>
</tr>
<tr>
<td>Tarko</td>
<td>02/28/1980</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2fd</td>
<td>15:00:00.09</td>
<td></td>
</tr>
<tr>
<td>Taunton</td>
<td>12/04/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aa</td>
<td>16:00:00.15</td>
<td></td>
</tr>
<tr>
<td>Teak</td>
<td>08/01/1958</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Techado</td>
<td>09/22/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U4o</td>
<td>15:00:00.12</td>
<td></td>
</tr>
<tr>
<td>Tee</td>
<td>05/07/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ab</td>
<td>15:47:11.15</td>
<td></td>
</tr>
<tr>
<td>Tejon</td>
<td>05/17/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3cg</td>
<td>14:55:00.00</td>
<td></td>
</tr>
<tr>
<td>Teleme</td>
<td>02/06/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cl</td>
<td>16:13:00.17</td>
<td></td>
</tr>
<tr>
<td>Temescal</td>
<td>11/02/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4ab</td>
<td>15:30:00.16</td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Longitude</td>
<td>Surface Elevation</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
<td>Detonation</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>37.333</td>
<td>-116.312</td>
<td>2035</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Stinger</td>
</tr>
<tr>
<td>37.045</td>
<td>-116.036</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>5.1 kt</td>
<td>Stoat</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.128</td>
<td>1370</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>31 kt</td>
<td>Stoddard</td>
</tr>
<tr>
<td>37.111</td>
<td>-116.040</td>
<td>1257</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Intermediate kt</td>
<td>Stones</td>
</tr>
<tr>
<td>37.107</td>
<td>-116.053</td>
<td>1243</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 500 kt</td>
<td>Strait</td>
</tr>
<tr>
<td>37.087</td>
<td>-116.008</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Strake</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.019</td>
<td>1198</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sturgeon</td>
</tr>
<tr>
<td>37.139</td>
<td>-116.142</td>
<td>1458</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Stutz</td>
</tr>
<tr>
<td>37.115</td>
<td>-116.027</td>
<td>1286</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Suede</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Weapons Effects</td>
<td>1.2 kt</td>
<td>Sugar</td>
</tr>
<tr>
<td>37.083</td>
<td>-116.343</td>
<td>1597</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>92 tons</td>
<td>Sulky</td>
</tr>
<tr>
<td>37.038</td>
<td>-116.058</td>
<td>1206</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Sundown-A</td>
</tr>
<tr>
<td>37.038</td>
<td>-116.058</td>
<td>1206</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Sundown-B</td>
</tr>
<tr>
<td>37.152</td>
<td>-116.064</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Sutter</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.030</td>
<td>1277</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>3.1 kt</td>
<td>Switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Underwater</td>
<td>Weapons Effects</td>
<td>Low</td>
<td>Swordfish</td>
</tr>
<tr>
<td>37.068</td>
<td>-116.036</td>
<td>1213</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Tan</td>
</tr>
<tr>
<td>37.061</td>
<td>-116.046</td>
<td>1212</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Tahoka</td>
</tr>
<tr>
<td>37.070</td>
<td>-115.993</td>
<td>1274</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Tajique</td>
</tr>
<tr>
<td>37.098</td>
<td>-116.016</td>
<td>1289</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
<td>Tajo</td>
</tr>
<tr>
<td>37.195</td>
<td>-116.201</td>
<td>2000</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>72 tons</td>
<td>Tamalpais</td>
</tr>
<tr>
<td>37.068</td>
<td>-116.036</td>
<td>1213</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Tan</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.030</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
<td>Tangerine</td>
</tr>
<tr>
<td>37.117</td>
<td>-116.083</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
<td>Tanya</td>
</tr>
<tr>
<td>37.134</td>
<td>-116.072</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Tapestry</td>
</tr>
<tr>
<td>37.009</td>
<td>-116.031</td>
<td>1181</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Tapper</td>
</tr>
<tr>
<td>37.127</td>
<td>-116.089</td>
<td>1280</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Tarko</td>
</tr>
<tr>
<td>37.128</td>
<td>-116.051</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
<td>Taunton</td>
</tr>
<tr>
<td>37.106</td>
<td>-116.050</td>
<td>1241</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
<td>Techado</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.068</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>7 kt</td>
<td>Tee</td>
</tr>
<tr>
<td>37.044</td>
<td>-116.017</td>
<td>1199</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Low</td>
<td>Tejon</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.022</td>
<td>1300</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Telem</td>
</tr>
<tr>
<td>37.093</td>
<td>-116.093</td>
<td>1263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
<td>Temescal</td>
</tr>
</tbody>
</table>
# United States Nuclear Detonations – By Name

<table>
<thead>
<tr>
<th>Detonation</th>
<th>Date</th>
<th>Sponsor</th>
<th>Location</th>
<th>Hole</th>
<th>Time (GMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenabo</td>
<td>10/12/1990</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20bb</td>
<td>17:30:00.08</td>
</tr>
<tr>
<td>Tenaja</td>
<td>04/17/1982</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lh</td>
<td>18:00:00.09</td>
</tr>
<tr>
<td>Tendrac</td>
<td>12/07/1962</td>
<td>LANL/UK</td>
<td>NTS</td>
<td>U3ba</td>
<td>19:00:00.10</td>
</tr>
<tr>
<td>Tern</td>
<td>01/29/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dw</td>
<td>18:22:00.03</td>
</tr>
<tr>
<td>Terrine-White</td>
<td>12/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bi1</td>
<td>19:00:00.04</td>
</tr>
<tr>
<td>Terrine-Yellow</td>
<td>12/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bi2</td>
<td>19:00:00.04</td>
</tr>
<tr>
<td>Tesla</td>
<td>03/01/1955</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td>- - - -</td>
</tr>
<tr>
<td>Tewa</td>
<td>07/20/1956</td>
<td>LLNL</td>
<td>Bikini island</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Texarkana</td>
<td>02/10/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ca</td>
<td>20:06:00.06</td>
</tr>
<tr>
<td>Thistle</td>
<td>04/30/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bg</td>
<td>14:00:00.00</td>
</tr>
<tr>
<td>Ticking</td>
<td>08/21/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bj</td>
<td>13:43:08.15</td>
</tr>
<tr>
<td>Tierra</td>
<td>12/15/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U19ac</td>
<td>14:45:00.00</td>
</tr>
<tr>
<td>Tightrope</td>
<td>11/04/1962</td>
<td>LANL/DoD</td>
<td>Johnston Island area</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Tijeras</td>
<td>10/14/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U7y</td>
<td>14:30:00.04</td>
</tr>
<tr>
<td>Tili</td>
<td>11/11/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U4ak</td>
<td>20:00:09.09</td>
</tr>
<tr>
<td>Tinderbox</td>
<td>11/22/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9az</td>
<td>16:19:00.04</td>
</tr>
<tr>
<td>Tiny Tot</td>
<td>06/17/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U15e</td>
<td>17:00:00.09</td>
</tr>
<tr>
<td>Tioga</td>
<td>10/18/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9f</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Titania</td>
<td>10/30/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 8</td>
<td>- - - -</td>
</tr>
<tr>
<td>Tobacco</td>
<td>05/30/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Tomato</td>
<td>04/07/1966</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ek</td>
<td>22:27:30.04</td>
</tr>
<tr>
<td>Tomme/Midnight Zephyr</td>
<td>09/21/1983</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U12n.18</td>
<td>15:00:00.09</td>
</tr>
<tr>
<td>Topgallant</td>
<td>02/28/1975</td>
<td>LANL</td>
<td>NTS</td>
<td>U4e</td>
<td>16:15:00.09</td>
</tr>
<tr>
<td>Topmast</td>
<td>03/23/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U7ay</td>
<td>16:30:00.11</td>
</tr>
<tr>
<td>Torch</td>
<td>02/21/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fj</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Tornero</td>
<td>02/11/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3II</td>
<td>16:45:00.07</td>
</tr>
<tr>
<td>Torrillo</td>
<td>10/11/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9aq</td>
<td>21:00:00.16</td>
</tr>
<tr>
<td>Torrido</td>
<td>05/27/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U7w</td>
<td>14:15:00.04</td>
</tr>
<tr>
<td>Tortugas</td>
<td>03/01/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gg</td>
<td>17:45:00.09</td>
</tr>
<tr>
<td>Towanda</td>
<td>05/02/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U19ab</td>
<td>15:20:00.08</td>
</tr>
<tr>
<td>Toyah</td>
<td>03/15/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9ac</td>
<td>16:22:53.14</td>
</tr>
<tr>
<td>Transom</td>
<td>05/10/1978</td>
<td>LANL</td>
<td>NTS</td>
<td>U4f</td>
<td>15:00:00.07</td>
</tr>
<tr>
<td>Traveler</td>
<td>05/04/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cd</td>
<td>13:32:17.09</td>
</tr>
<tr>
<td>Trebbiano</td>
<td>09/04/1981</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lj</td>
<td>15:00:00.10</td>
</tr>
<tr>
<td>Trinity</td>
<td>07/16/1945</td>
<td>LANL</td>
<td>Alamogordo, New Mexico</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td>Trogon</td>
<td>07/24/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dj</td>
<td>18:30:00.04</td>
</tr>
<tr>
<td>Truchas-Chacon</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hn</td>
<td>14:30:00.03</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.032</td>
<td>1275</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>370 tons</td>
</tr>
<tr>
<td>37.248</td>
<td>-116.495</td>
<td>1871</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.017</td>
<td>-116.011</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.052</td>
<td>-116.030</td>
<td>1202</td>
<td>Shaft</td>
<td>Joint US-UK</td>
<td>Low</td>
</tr>
<tr>
<td>37.045</td>
<td>-116.014</td>
<td>1202</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.036</td>
<td>1264</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.029</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>7 kt</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>5 Mt</td>
</tr>
<tr>
<td>37.077</td>
<td>-116.001</td>
<td>1267</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.090</td>
<td>-116.007</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.083</td>
<td>1316</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.027</td>
<td>1288</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.281</td>
<td>-116.306</td>
<td>2118</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td></td>
<td>Rocket</td>
<td></td>
<td></td>
<td>Weapons Effects</td>
<td>Low</td>
</tr>
<tr>
<td>37.071</td>
<td>-116.006</td>
<td>1249</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.076</td>
<td>-116.069</td>
<td>1232</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.140</td>
<td>-116.043</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.223</td>
<td>-116.058</td>
<td>- - -</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.129</td>
<td>-116.041</td>
<td>1254</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td></td>
<td></td>
<td>Safety Experiment</td>
<td>0.2 tons</td>
</tr>
<tr>
<td></td>
<td>Barge</td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>11.6 kt</td>
</tr>
<tr>
<td>37.017</td>
<td>-115.993</td>
<td>1195</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.210</td>
<td>-116.210</td>
<td>2230</td>
<td>Tunnel</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.106</td>
<td>-116.057</td>
<td>1245</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.099</td>
<td>-116.020</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.042</td>
<td>-116.003</td>
<td>1210</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.011</td>
<td>-116.046</td>
<td>1186</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.035</td>
<td>1267</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>380 tons</td>
</tr>
<tr>
<td>37.075</td>
<td>-115.996</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.066</td>
<td>-116.047</td>
<td>1216</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.253</td>
<td>-116.326</td>
<td>2085</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>37.126</td>
<td>-116.046</td>
<td>1252</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.088</td>
<td>-116.053</td>
<td>1231</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Zero</td>
</tr>
<tr>
<td>37.137</td>
<td>-116.138</td>
<td>1430</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.058</td>
<td>-116.049</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td></td>
<td></td>
<td>Weapons Related</td>
<td>21 kt</td>
</tr>
<tr>
<td>37.046</td>
<td>-116.013</td>
<td>1204</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.014</td>
<td>-116.019</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Truchas-Chamisal</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ho</td>
<td>14:30:00.04</td>
</tr>
<tr>
<td>Truchas-Rodarte</td>
<td>10/28/1970</td>
<td>LANL</td>
<td>NTS</td>
<td>U3hm</td>
<td>14:30:00.04</td>
</tr>
<tr>
<td>Truckee</td>
<td>06/09/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Trumbull</td>
<td>09/26/1974</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4aa</td>
<td>14:30:00.16</td>
</tr>
<tr>
<td>Tub-A</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajc</td>
<td>21:30:00.00</td>
</tr>
<tr>
<td>Tub-B</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajb</td>
<td>21:30:00.00</td>
</tr>
<tr>
<td>Tub-C</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajf</td>
<td>21:30:00.00</td>
</tr>
<tr>
<td>Tub-D</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ajd</td>
<td>21:30:00.00</td>
</tr>
<tr>
<td>Tub-F</td>
<td>06/06/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10aja</td>
<td>21:30:00.00</td>
</tr>
<tr>
<td>Tulia</td>
<td>05/26/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U4s</td>
<td>18:07:00.02</td>
</tr>
<tr>
<td>Tuloso</td>
<td>12/12/1972</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gi</td>
<td>16:30:00.04</td>
</tr>
<tr>
<td>Tun-A</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10am1</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Tun-B</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10am2</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Tun-C</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10am3</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Tun-D</td>
<td>12/10/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10am4</td>
<td>15:30:00.07</td>
</tr>
<tr>
<td>Tuna</td>
<td>12/20/1963</td>
<td>LANL</td>
<td>NTS</td>
<td>U3de</td>
<td>15:24:00.13</td>
</tr>
<tr>
<td>Turf</td>
<td>04/24/1964</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10c</td>
<td>20:10:00.15</td>
</tr>
<tr>
<td>Turk</td>
<td>03/07/1955</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10c</td>
<td>20:10:00.15</td>
</tr>
<tr>
<td>Turnstone</td>
<td>10/16/1964</td>
<td>LANL</td>
<td>NTS</td>
<td>U3dt</td>
<td>15:59:30.03</td>
</tr>
<tr>
<td>Turquoise</td>
<td>04/14/1983</td>
<td>LANL</td>
<td>NTS</td>
<td>U7bu</td>
<td>19:05:00.12</td>
</tr>
<tr>
<td>Tweed</td>
<td>05/21/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bn</td>
<td>13:08:52.11</td>
</tr>
<tr>
<td>Tybo</td>
<td>05/14/1975</td>
<td>LLNL</td>
<td>NTS</td>
<td>U20y</td>
<td>14:00:00.16</td>
</tr>
<tr>
<td>Tyg-A</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc1e</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Tyg-B</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc2d</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Tyg-C</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc3c</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Tyg-D</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc4a</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Tyg-E</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc5b</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Tyg-F</td>
<td>12/12/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dc6f</td>
<td>15:10:00.08</td>
</tr>
<tr>
<td>Umbre</td>
<td>06/29/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U3em</td>
<td>11:25:00.04</td>
</tr>
<tr>
<td>Umbrella</td>
<td>06/08/1958</td>
<td>LANL/DoD</td>
<td>Enewetak</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Uncle</td>
<td>11/29/1951</td>
<td>LANL/DoD</td>
<td>NTS</td>
<td>Area 10</td>
<td>20:00:00.00</td>
</tr>
<tr>
<td>Union</td>
<td>04/25/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Uranus</td>
<td>03/14/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12c.01</td>
<td>22:00:00.00</td>
</tr>
<tr>
<td>Valencia</td>
<td>09/26/1958</td>
<td>LANL</td>
<td>NTS</td>
<td>U3r</td>
<td>20:00:00.00</td>
</tr>
<tr>
<td>Valise</td>
<td>03/18/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9by</td>
<td>14:30:00.12</td>
</tr>
<tr>
<td>Vat</td>
<td>10/10/1968</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9cf</td>
<td>14:30:00.00</td>
</tr>
<tr>
<td>Vaughn</td>
<td>03/15/1985</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lr</td>
<td>16:31:00.10</td>
</tr>
<tr>
<td>Velarde</td>
<td>04/25/1973</td>
<td>LANL</td>
<td>NTS</td>
<td>U3jk</td>
<td>22:25:00.07</td>
</tr>
<tr>
<td>Venus</td>
<td>02/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12d.01</td>
<td>01:00:00.00</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.014</td>
<td>-116.018</td>
<td>1182</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.015</td>
<td>-116.020</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Airdrop</td>
<td>210 kt</td>
</tr>
<tr>
<td>37.093</td>
<td>-116.096</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.167</td>
<td>-116.043</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.044</td>
<td>1279</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.042</td>
<td>1283</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.167</td>
<td>-116.046</td>
<td>1278</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.167</td>
<td>-116.043</td>
<td>1282</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.086</td>
<td>-116.056</td>
<td>1230</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.031</td>
<td>-116.022</td>
<td>1189</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.168</td>
<td>-116.080</td>
<td>1323</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.080</td>
<td>1324</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.168</td>
<td>-116.078</td>
<td>1319</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.078</td>
<td>1320</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.053</td>
<td>-116.034</td>
<td>1203</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.150</td>
<td>-116.056</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>43 kt</td>
</tr>
<tr>
<td>37.033</td>
<td>-116.026</td>
<td>1191</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.073</td>
<td>-116.047</td>
<td>1219</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 150 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.029</td>
<td>1281</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.221</td>
<td>-116.475</td>
<td>1880</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>200 to 1000 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.081</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.080</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.078</td>
<td>1268</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.079</td>
<td>1272</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.120</td>
<td>-116.077</td>
<td>1270</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.083</td>
<td>1273</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.029</td>
<td>-116.023</td>
<td>1188</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>10 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Underwater</td>
<td>Weapons Effects</td>
<td>8 kt</td>
</tr>
<tr>
<td>37.168</td>
<td>-116.043</td>
<td>1283</td>
<td>Crater</td>
<td>Weapons Effects</td>
<td>1.2 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barge</td>
<td>Weapons Related</td>
<td>6.9 Mt</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.115</td>
<td>- - - -</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>Less than 1 ton</td>
</tr>
<tr>
<td>37.050</td>
<td>-116.031</td>
<td>1201</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>2 tons</td>
</tr>
<tr>
<td>37.139</td>
<td>-116.042</td>
<td>1261</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.133</td>
<td>-116.043</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.058</td>
<td>-116.046</td>
<td>1211</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 150 kt</td>
</tr>
<tr>
<td>36.994</td>
<td>-116.022</td>
<td>1176</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.113</td>
<td>-116.115</td>
<td>- - - -</td>
<td>Tunnel</td>
<td>Safety Experiment</td>
<td>Less than 1 ton</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>---------</td>
<td>------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Verdello</td>
<td>07/31/1980</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ku</td>
<td>18:19:00.09</td>
</tr>
<tr>
<td>Vermejo</td>
<td>10/02/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U4r</td>
<td>18:14:00.10</td>
</tr>
<tr>
<td>Vesta</td>
<td>10/17/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>S9e</td>
<td></td>
</tr>
<tr>
<td>Victoria</td>
<td>06/19/1992</td>
<td>LANL</td>
<td>NTS</td>
<td>U3kv</td>
<td>16:45:00.00</td>
</tr>
<tr>
<td>Vide</td>
<td>04/30/1981</td>
<td>LLNL</td>
<td>NTS</td>
<td>U8k</td>
<td>14:35:00.08</td>
</tr>
<tr>
<td>Vigil</td>
<td>11/22/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ad</td>
<td>15:00:00.13</td>
</tr>
<tr>
<td>Ville</td>
<td>06/12/1985</td>
<td>LLNL</td>
<td>NTS</td>
<td>U4am</td>
<td>17:30:00.09</td>
</tr>
<tr>
<td>Villita</td>
<td>11/10/1984</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ld</td>
<td>16:40:00.09</td>
</tr>
<tr>
<td>Vise</td>
<td>01/30/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ej</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Vito</td>
<td>07/14/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ab</td>
<td>13:30:00.08</td>
</tr>
<tr>
<td>Vulcan</td>
<td>06/25/1966</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bd</td>
<td>17:13:00.07</td>
</tr>
<tr>
<td>Waco</td>
<td>12/01/1987</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lu</td>
<td>16:30:00.09</td>
</tr>
<tr>
<td>Wagtail</td>
<td>03/03/1965</td>
<td>LANL</td>
<td>NTS</td>
<td>U3an</td>
<td>19:13:00.03</td>
</tr>
<tr>
<td>Wahoo</td>
<td>05/16/1958</td>
<td>LANL/DoD</td>
<td>Eniwetok</td>
<td></td>
<td>- - - -</td>
</tr>
<tr>
<td>Waller</td>
<td>10/02/1973</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2bz</td>
<td>15:15:00.16</td>
</tr>
<tr>
<td>Walnut</td>
<td>06/14/1958</td>
<td>LLNL</td>
<td>Eniwetok</td>
<td></td>
<td>- - - -</td>
</tr>
<tr>
<td>Ward</td>
<td>02/08/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10x</td>
<td>15:15:00.13</td>
</tr>
<tr>
<td>Washer</td>
<td>08/10/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10r</td>
<td>14:10:00.00</td>
</tr>
<tr>
<td>Wasp</td>
<td>02/18/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Wasp Prime</td>
<td>03/29/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td></td>
</tr>
<tr>
<td>Welder</td>
<td>10/03/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3fs</td>
<td>14:00:00.04</td>
</tr>
<tr>
<td>Wembley</td>
<td>06/05/1968</td>
<td>LANL</td>
<td>NTS</td>
<td>U3ey</td>
<td>14:21:30.04</td>
</tr>
<tr>
<td>Wexford</td>
<td>08/30/1984</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2cr</td>
<td>14:45:00.00</td>
</tr>
<tr>
<td>Wheeler</td>
<td>09/06/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>05/25/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9b</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Whiteface-A</td>
<td>12/20/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lp</td>
<td>22:00:00.06</td>
</tr>
<tr>
<td>Whiteface-B</td>
<td>12/20/1989</td>
<td>LANL</td>
<td>NTS</td>
<td>U3lp</td>
<td>22:00:00.06</td>
</tr>
<tr>
<td>Whitney</td>
<td>09/23/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 2</td>
<td></td>
</tr>
<tr>
<td>Wichita</td>
<td>07/27/1982</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9y</td>
<td>21:00:00.16</td>
</tr>
<tr>
<td>Wigwam</td>
<td>05/14/1955</td>
<td>LANL/DoD</td>
<td>Pacific</td>
<td></td>
<td>- - - -</td>
</tr>
<tr>
<td>Wilson</td>
<td>06/18/1957</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 9</td>
<td></td>
</tr>
<tr>
<td>Winch</td>
<td>02/04/1969</td>
<td>LANL</td>
<td>NTS</td>
<td>U3gf</td>
<td>15:00:00.04</td>
</tr>
<tr>
<td>Wineskin</td>
<td>01/15/1969</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12r</td>
<td>19:30:00.04</td>
</tr>
<tr>
<td>Wishbone</td>
<td>02/18/1965</td>
<td>LLNL/DoD</td>
<td>NTS</td>
<td>U5a</td>
<td>16:18:47.15</td>
</tr>
<tr>
<td>Wolverine</td>
<td>10/12/1962</td>
<td>LANL</td>
<td>NTS</td>
<td>U3av</td>
<td>17:00:00.12</td>
</tr>
<tr>
<td>Wool</td>
<td>01/14/1965</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9bh</td>
<td>16:00:00.14</td>
</tr>
<tr>
<td>Worth</td>
<td>10/25/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10ag</td>
<td>14:45:00.08</td>
</tr>
<tr>
<td>Wrangell</td>
<td>10/22/1958</td>
<td>LLNL</td>
<td>NTS</td>
<td>Area 5</td>
<td></td>
</tr>
<tr>
<td>X-Ray</td>
<td>04/14/1948</td>
<td>LANL</td>
<td>Eniwetok</td>
<td></td>
<td>- - - -</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>37.013</td>
<td>-116.024</td>
<td>1183</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.085</td>
<td>-116.054</td>
<td>1229</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surface</td>
<td>Safety Experiment</td>
<td>24 tons</td>
</tr>
<tr>
<td>37.005</td>
<td>-116.011</td>
<td>1179</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.177</td>
<td>-116.086</td>
<td>1346</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.169</td>
<td>-116.049</td>
<td>1278</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.088</td>
<td>-116.085</td>
<td>1250</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.000</td>
<td>-116.018</td>
<td>1177</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.053</td>
<td>-116.030</td>
<td>1204</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.165</td>
<td>-116.046</td>
<td>1278</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.155</td>
<td>-116.073</td>
<td>1300</td>
<td>Shaft</td>
<td>Plowshare</td>
<td>25 kt</td>
</tr>
<tr>
<td>36.996</td>
<td>-116.005</td>
<td>1176</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.064</td>
<td>-116.038</td>
<td>1210</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.154</td>
<td>-116.069</td>
<td>1294</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.157</td>
<td>-116.048</td>
<td>1271</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.144</td>
<td>-116.126</td>
<td>1376</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.125</td>
<td>-116.053</td>
<td>1253</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.032</td>
<td>- - - -</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.026</td>
<td>-116.032</td>
<td>- - - -</td>
<td>Shaft</td>
<td>Safety Experiment</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.130</td>
<td>-116.057</td>
<td>1265</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Underwater</td>
<td>Weapons Effects</td>
<td>30 kt</td>
</tr>
<tr>
<td>37.009</td>
<td>-116.043</td>
<td>1185</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.209</td>
<td>-116.226</td>
<td>2263</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>36.818</td>
<td>-115.950</td>
<td>913</td>
<td>Shaft</td>
<td>Weapons Effects</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.049</td>
<td>-116.033</td>
<td>1200</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Low</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.026</td>
<td>1287</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.156</td>
<td>-116.049</td>
<td>1269</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Balloon</td>
<td>Weapons Related</td>
<td>115 tons</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tower</td>
<td>Weapons Related</td>
<td>37 kt</td>
</tr>
<tr>
<td>Detonation</td>
<td>Date (mm/dd/yyyy) (GMT)</td>
<td>Sponsor</td>
<td>Location</td>
<td>Hole</td>
<td>Time (GMT)</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>------------------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Yankee</td>
<td>05/04/1954</td>
<td>LANL</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yannigan-Blue</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay3</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Yannigan-Red</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay1</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Yannigan-White</td>
<td>02/26/1970</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2ay2</td>
<td>15:30:00.04</td>
</tr>
<tr>
<td>Yard</td>
<td>09/07/1967</td>
<td>LLNL</td>
<td>NTS</td>
<td>U10af</td>
<td>13:45:00.00</td>
</tr>
<tr>
<td>Yellowwood</td>
<td>05/26/1958</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yerba</td>
<td>12/14/1971</td>
<td>LANL</td>
<td>NTS</td>
<td>U1c</td>
<td>21:10:01.04</td>
</tr>
<tr>
<td>Yeso</td>
<td>06/10/1962</td>
<td>LANL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yoke</td>
<td>04/30/1948</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>York</td>
<td>08/24/1962</td>
<td>LLNL</td>
<td>NTS</td>
<td>U9z</td>
<td>15:00:00.15</td>
</tr>
<tr>
<td>Yuba</td>
<td>06/05/1963</td>
<td>LLNL</td>
<td>NTS</td>
<td>U12b.10</td>
<td>17:00:00.12</td>
</tr>
<tr>
<td>Yucca</td>
<td>04/28/1958</td>
<td>LANL/DoD</td>
<td>Pacific</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yukon</td>
<td>05/08/1962</td>
<td>LLNL</td>
<td>Christmas Island area</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yuma</td>
<td>05/27/1956</td>
<td>LLNL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zaza</td>
<td>09/27/1967</td>
<td>LANL</td>
<td>NTS</td>
<td>U4c</td>
<td>17:00:00.04</td>
</tr>
<tr>
<td>Zebra</td>
<td>05/14/1948</td>
<td>LANL</td>
<td>Enewetak</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zinnia</td>
<td>05/17/1972</td>
<td>LLNL</td>
<td>NTS</td>
<td>U2dk</td>
<td>14:10:00.16</td>
</tr>
<tr>
<td>Zucchini</td>
<td>05/15/1955</td>
<td>LANL</td>
<td>NTS</td>
<td>Area 7</td>
<td>-</td>
</tr>
<tr>
<td>Zuni</td>
<td>05/27/1956</td>
<td>LLNL</td>
<td>Bikini Island</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Latitude (degrees)</td>
<td>Longitude (degrees)</td>
<td>Surface Elevation (meters)</td>
<td>Type</td>
<td>Purpose</td>
<td>Yield Range</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>------</td>
<td>-----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>37.114</td>
<td>-116.067</td>
<td>1258</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>13.5 Mt</td>
</tr>
<tr>
<td>37.116</td>
<td>-116.062</td>
<td>1258</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.118</td>
<td>-116.067</td>
<td>1261</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.153</td>
<td>-116.054</td>
<td>Shaft</td>
<td>Barge</td>
<td>Weapons Related</td>
<td>20 to 200 kt</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.060</td>
<td>Shaft</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.119</td>
<td>-116.040</td>
<td>1256</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>3 Mt</td>
</tr>
<tr>
<td>37.197</td>
<td>-116.210</td>
<td>2240</td>
<td>Tunnel</td>
<td>Weapons Related</td>
<td>49 kt</td>
</tr>
<tr>
<td>37.197</td>
<td>-116.210</td>
<td>2240</td>
<td>Balloon</td>
<td>Weapons Effects</td>
<td>3.1 kt</td>
</tr>
<tr>
<td>37.099</td>
<td>-116.054</td>
<td>1240</td>
<td>Airdrop</td>
<td>Weapons Related</td>
<td>100 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.089</td>
<td>1277</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>190 tons</td>
</tr>
<tr>
<td>37.099</td>
<td>-116.054</td>
<td>1240</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>18 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.089</td>
<td>1277</td>
<td>Shaft</td>
<td>Weapons Related</td>
<td>Less than 20 kt</td>
</tr>
<tr>
<td>37.121</td>
<td>-116.089</td>
<td>1277</td>
<td>Tower</td>
<td>Weapons Related</td>
<td>28 kt</td>
</tr>
<tr>
<td>37.023</td>
<td>-116.060</td>
<td>1202</td>
<td>Surface</td>
<td>Weapons Related</td>
<td>3.5 Mt</td>
</tr>
</tbody>
</table>
DoD, see U.S. Department of Defense.


This page intentionally left blank.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC</td>
<td>U.S. Atomic Energy Commission</td>
</tr>
<tr>
<td>ASROC</td>
<td>Antisubmarine Rocket</td>
</tr>
<tr>
<td>CY</td>
<td>Calendar Year</td>
</tr>
<tr>
<td>DoD</td>
<td>U.S. Department of Defense</td>
</tr>
<tr>
<td>DOE</td>
<td>U.S. Department of Energy</td>
</tr>
<tr>
<td>DOE/NV</td>
<td>U.S. Department of Energy, Nevada Operations Office</td>
</tr>
<tr>
<td>ERDA</td>
<td>U.S. Energy Research and Development Administration</td>
</tr>
<tr>
<td>GMT</td>
<td>Greenwich Mean Time</td>
</tr>
<tr>
<td>HA</td>
<td>High Altitude</td>
</tr>
<tr>
<td>JVE</td>
<td>Joint Verification Experiment</td>
</tr>
<tr>
<td>kt</td>
<td>kiloton</td>
</tr>
<tr>
<td>LANL</td>
<td>Los Alamos National Laboratory</td>
</tr>
<tr>
<td>LLNL</td>
<td>Lawrence Livermore National Laboratory</td>
</tr>
<tr>
<td>MET</td>
<td>Military Effects Tests</td>
</tr>
<tr>
<td>mm</td>
<td>millimeter</td>
</tr>
<tr>
<td>Mt</td>
<td>megaton</td>
</tr>
<tr>
<td>NAFR</td>
<td>Nellis Air Force Range</td>
</tr>
<tr>
<td>NTS</td>
<td>Nevada Test Site</td>
</tr>
<tr>
<td>TNT</td>
<td>trinitrotoluene</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
</tbody>
</table>
This page intentionally left blank.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airburst</td>
<td>The explosion of a nuclear weapon at such a height that the expanding fireball does not touch the earth’s surface prior to the time the fireball reaches its maximum luminosity. The airburst reported in this document resulted from the detonation of a device fired from a 280mm cannon.</td>
</tr>
<tr>
<td>Airdrop</td>
<td>A nuclear device dropped from an aircraft and exploded in the atmosphere.</td>
</tr>
<tr>
<td>Atmospheric</td>
<td>A test conducted aboveground or above water; i.e., in the open air.</td>
</tr>
<tr>
<td>Balloon</td>
<td>A nuclear device suspended from a balloon and exploded in the atmosphere.</td>
</tr>
<tr>
<td>Barge</td>
<td>A nuclear device exploded from a barge moored in the lagoon at Enewetak or Bikini.</td>
</tr>
<tr>
<td>Crater</td>
<td>A nuclear device placed shallow enough underground to produce a throw-out of earth when exploded.</td>
</tr>
<tr>
<td>Detonation</td>
<td>A single nuclear device explosion; one or more comprise a test.</td>
</tr>
<tr>
<td>Hole</td>
<td>The alpha-numeric designation is given to the nuclear weapon test/detonation conducted at the Nevada Test Site. The uppercase alpha designator refers to the type of location, i.e., S = surface, U = underground. The numeric designator refers to the geographical area of the Nevada Test Site. The remaining letters refer to the sequential ordering of the test/detonation. In the case of most atmospheric tests, only the geographical area of the Nevada Test Site is given.</td>
</tr>
<tr>
<td>Joint US-UK</td>
<td>A nuclear test conducted jointly by the United States and the United Kingdom under a cooperative agreement in effect between the two countries since August 4, 1958.</td>
</tr>
<tr>
<td>kt</td>
<td>A kiloton. The energy of a nuclear explosion that is equivalent the explosive power of 1,000 tons of TNT.</td>
</tr>
<tr>
<td>Mt</td>
<td>A megaton. The energy of a nuclear explosion that is equivalent to the explosive power of one million tons of TNT.</td>
</tr>
<tr>
<td>NTS</td>
<td>The Nevada Test Site is located in southern Nevada in Nye County. It is 65 miles northwest of Las Vegas, Nevada and covers an area of approximately 1,375 square miles.</td>
</tr>
<tr>
<td>Offsite</td>
<td>Offsite is any place outside the Test Range Complex.</td>
</tr>
</tbody>
</table>
Onsite

A notation that radioactivity was detected on site only is made for any test from which there was an unplanned release of radioactivity into the atmosphere that was not detectable beyond the boundaries of the Test Range Complex.

Plowshare

Application of nuclear explosives to develop peaceful uses for atomic energy.

Rocket

A nuclear device launched by rocket and exploded in the atmosphere.

Roman Candle

Test conducted underground in an unstemmed hole to minimize, but not eliminate, the release of radioactivity to the atmosphere. Because incandescent gases were released, this was sometimes referred to as a “Roman candle” effect.

Safety Experiment

Experiment designed to confirm a nuclear explosion will not occur in case of an accidental detonation of the explosive associated with the device.

Seismic Calibration

A nuclear test to evaluate seismic effects of an underground explosion.

Shaft

A nuclear device exploded at the bottom of a drilled or mined vertical hole. Some safety tests were set off at the bottom of unstemmed drilled holes, producing a “Roman candle” effect.

Sponsor

The organization(s), i.e., national weapons laboratory or laboratories, the U.S. Department of Defense and/or the United Kingdom, that is/are responsible for conducting a particular nuclear weapon test/detonation.

Storage-Transportation

Detonations of combinations of high explosives and nuclear materials designed to study distribution of nuclear materials during accidents in several transportation and storage configurations.

Surface

A nuclear device placed on or close to the earth’s surface.

Surface Elevation

The vertical distance from mean sea level to a point on the earth’s surface, generally refers to the surface ground zero of a nuclear weapon test/detonation.

Test

A test is defined in the Threshold Test Ban Treaty as either a single underground nuclear explosion conducted at a test site, or two or more underground nuclear explosions conducted within an area delineated by a circle having a diameter of two kilometers and conducted within a total period of time not to exceed 0.1 second.

Test Range Complex

An area that includes both the Nevada Test Site and the adjacent Government-controlled Nellis Air Force Range.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ton</td>
<td>The yield of a nuclear device is a measure of the amount of energy released when it explodes. It is stated in terms of the quantity of TNT that would produce the same amount of explosive energy. A ton is equivalent to one ton of TNT.</td>
</tr>
<tr>
<td>Thermonuclear Device</td>
<td>Commonly referred to as a &quot;hydrogen bomb;&quot; part of the explosion energy results from the fusion of light nuclei such as those of hydrogen isotopes.</td>
</tr>
<tr>
<td>Tower</td>
<td>A nuclear device mounted at the top of a steel or wooden tower and exploded in the atmosphere.</td>
</tr>
<tr>
<td>Tunnel</td>
<td>A nuclear device exploded at the end of a long horizontal drift mined into a mountain or mesa in a way that places the burst point deep within the earth.</td>
</tr>
<tr>
<td>Underground</td>
<td>Underground nuclear test conducted in a tunnel or at the bottom of a drilled hole or shaft. Some underground nuclear tests were not designed to contain all radioactivity; e.g., cratering tests or safety experiments.</td>
</tr>
<tr>
<td>Underwater</td>
<td>A nuclear test conducted underwater.</td>
</tr>
<tr>
<td>Vela Uniform</td>
<td>U.S. Department of Defense (DoD) program designed to improve the capability to detect, identify, and locate underground nuclear explosions.</td>
</tr>
<tr>
<td>Verification Experiment</td>
<td>A test on which the Russian government exercised its right to verify under the terms of the Threshold Test Ban Treaty.</td>
</tr>
<tr>
<td>Weapons Effects</td>
<td>A nuclear test to evaluate the civil or military effects of a nuclear detonation on various targets, such as military hardware.</td>
</tr>
<tr>
<td>Weapons Related</td>
<td>A nuclear detonation conducted for the purpose of testing a nuclear device intended for a specific type of weapon system.</td>
</tr>
<tr>
<td>Yield</td>
<td>The total effective energy released in a nuclear explosion. It is usually expressed in terms of equivalent tonnage of TNT required to produce the same energy release in an explosion.</td>
</tr>
</tbody>
</table>
This page intentionally left blank.
### Index of Nuclear Test Series

<table>
<thead>
<tr>
<th>Operation</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Anvil</td>
<td>70</td>
</tr>
<tr>
<td>Operation Aqueduct</td>
<td>86</td>
</tr>
<tr>
<td>Operation Arbor</td>
<td>68</td>
</tr>
<tr>
<td>Operation Argus</td>
<td>12</td>
</tr>
<tr>
<td>Operation Bedrock</td>
<td>68</td>
</tr>
<tr>
<td>Operation Bowline</td>
<td>50</td>
</tr>
<tr>
<td>Operation Buster</td>
<td>2</td>
</tr>
<tr>
<td>Operation Castle</td>
<td>4</td>
</tr>
<tr>
<td>Operation Charioteer</td>
<td>82</td>
</tr>
<tr>
<td>Operation Cornerstone</td>
<td>84</td>
</tr>
<tr>
<td>Operation Cresset</td>
<td>72</td>
</tr>
<tr>
<td>Operation Crossroads</td>
<td>2</td>
</tr>
<tr>
<td>Operation Crosstie</td>
<td>46</td>
</tr>
<tr>
<td>Operation Dominic</td>
<td>20</td>
</tr>
<tr>
<td>Operation Emery</td>
<td>60</td>
</tr>
<tr>
<td>Operation Fishbowl</td>
<td>24</td>
</tr>
<tr>
<td>Operation Flintlock</td>
<td>38</td>
</tr>
<tr>
<td>Operation Fulcrum</td>
<td>72</td>
</tr>
<tr>
<td>Operation Fusileer</td>
<td>80</td>
</tr>
<tr>
<td>Operation Greenhouse</td>
<td>2</td>
</tr>
<tr>
<td>Operation Grenadier</td>
<td>80</td>
</tr>
<tr>
<td>Operation Grommet</td>
<td>62</td>
</tr>
<tr>
<td>Operation Guardian</td>
<td>76</td>
</tr>
<tr>
<td>Operation Hardtack I</td>
<td>10</td>
</tr>
<tr>
<td>Operation Hardtack II</td>
<td>12</td>
</tr>
<tr>
<td>Operation Ivy</td>
<td>4</td>
</tr>
<tr>
<td>Operation Jangle</td>
<td>2</td>
</tr>
<tr>
<td>Operation Julin</td>
<td>88</td>
</tr>
<tr>
<td>Operation Latchkey</td>
<td>42</td>
</tr>
<tr>
<td>Operation Mandrel</td>
<td>54</td>
</tr>
<tr>
<td>Operation Musketeer</td>
<td>82</td>
</tr>
<tr>
<td>Operation Newsreel</td>
<td>10</td>
</tr>
<tr>
<td>Operation Niblick</td>
<td>30</td>
</tr>
<tr>
<td>Operation Nougat</td>
<td>16</td>
</tr>
<tr>
<td>Operation Phalanx</td>
<td>78</td>
</tr>
<tr>
<td>Operation Plumbbob</td>
<td>8</td>
</tr>
<tr>
<td>Operation Praetorian</td>
<td>78</td>
</tr>
</tbody>
</table>