

cause some countries, notably the USA, have provided a great deal of data while others have provided little or none.

The USSR, for example, has its own national seismic network, used for detection of earthquakes within its territory and as part of the global earthquake detection network. While the West has had access to some of these data, the USSR has never released seismic data on any nuclear explosion conducted at their test site.

Peaceful Nuclear Explosions

In 1976 the USA and USSR signed the Peaceful Nuclear Explosions Treaty which requires that both nations share information and access to sites of explosions used for peaceful purposes. Pursuant to this agreement both superpowers have released much information about the purpose of such explosions. For example, although the USA discontinued its use of peaceful nuclear explosions in 1973, they had generally been used until that time to create potential reservoirs for petroleum products or to ex-

plore the possibility of extracting heavy oils. In the case of the USSR, purposes have included:

- Excavating surface canals;
- Water diversion;
- Creating cavities for the storage of petroleum products; and, on one occasion;
- Extinguishing an oil-well fire.

Under the agreement, both countries also agreed to share data relating to the energy yields of these explosions, as well as data on the type of rock in which the explosions are carried out. Such information is needed in the calibration and, consequently, the overall verification process. To date, these data have been made liberally available by the USA and it is hoped that similar data will soon be released by the USSR.