

12-27-73

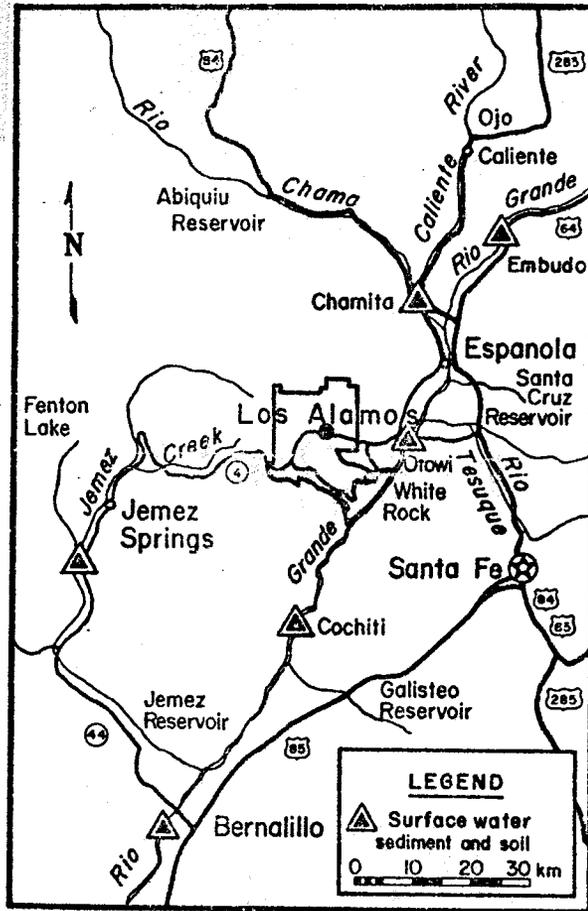


Fig. 9. Regional surface water, sediment, and soil sampling locations

"Plutonium and Strontium in Soil in the Los Alamos, Espanola, and Santa Fe, New Mexico Areas."²⁷⁰

"Plutonium and Strontium in Soil Near Technical Area 21, Los Alamos Scientific Laboratory, Los Alamos, New Mexico."²⁷¹

"Los Alamos Land Areas Environmental Radiation Survey 1972."²⁷²

A proposed plan for environmental monitoring of waste disposal areas was made by H-8, December 27, 1973.

It is the intention of the Environmental Section to establish a routine environmental monitoring program around all waste burial or storage areas both active and inactive....

From the standpoint of environmental surveillance we would like to document any current release or dispersion of contaminants from the disposal areas whether by atmospheric dispersion or by hydrologic transport. In consideration of the local ecology we would like to determine whether or not the buried materials have any effect on revegetation programs or ecological succession over completed waste pits; this would be in contrast to the normal disruption of the areas resulting from physical disturbance and operation of heavy equipment. Finally, for the waste management studies we would like to provide data which could be used to evaluate the longer range probabilities of migration of materials from the disposal site.

For the evaluation of atmospheric dis

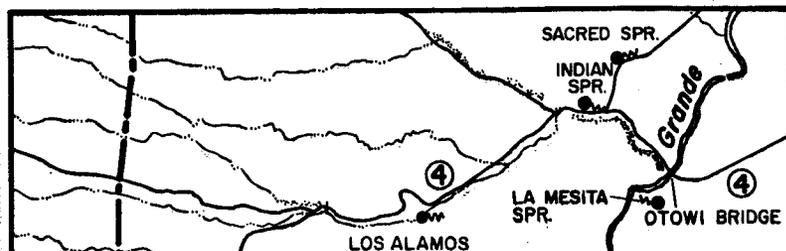


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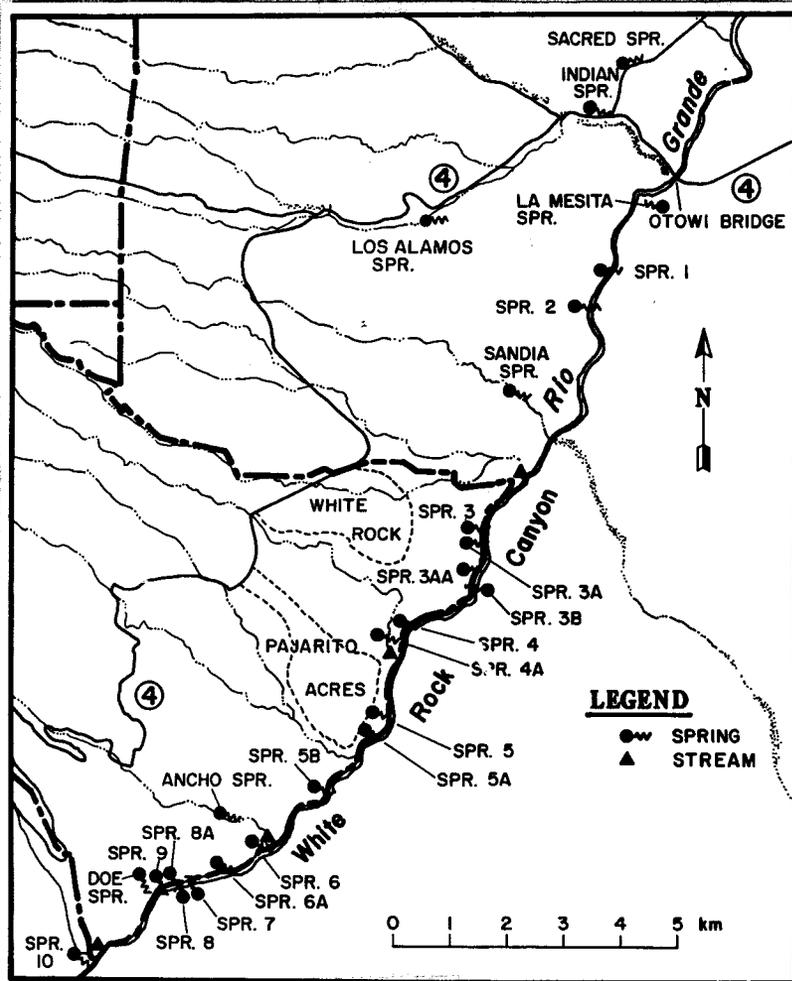


Fig. 10. Water sampling locations in White Rock Canyon of the Rio Grande

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For the evaluation of atmospheric dispersion from active waste pits, we plan to install high volume air samplers to be operated on limited duty cycles only during pit filling operations.... From these air samplers we would like to obtain data on general dust loadings of the atmosphere resulting from waste burial operations in addition to the identification of any releases of radioactive or chemical contaminants from the burial operations.

The monitoring of dispersion into the tuff or the migration of moisture through the filled pit and the surrounding tuff would be by means of sampling tubes extending from the surface to the level of the bottom of the pit or lower in an array around each pit.... We would intend to measure soil moisture profiles through these access tubes by means of a neutron moisture gauge. We would also sample any moisture that might be found in the sampling tubes as well as collecting core samples of the tuff at the bottoms of the access tubes.