

## LA BARGE CREEK RESERVOIR SITE, LINCOLN COUNTY

Location:- Sec. 8, T. 29 N., R. 116 W., near the head of La Barge Creek.

Date Examined:- October 8, 1956.

Storage:- A 68 foot dam will impound 7,000 acre-feet of water or a 100 foot dam will impound 10,000 acre-feet of water.

### Geology

The proposed reservoir will occupy La Barge Meadows, a flat basin that is underlain by sandstone and shale of the Cretaceous Aspen formation. This, in turn, is covered by an alluvial mantle consisting of clays and silts.

The northeast abutment is on poorly exposed greenish gray to olive partly fractured sandstone and shale of the Aspen formation. Here, these rocks strike N. 30° W. and dip 45° SW. The southwest abutment adjoins part of a lateral (?) moraine which consists of large boulders, gravel and sand. Murdock (1949) has reported that drill holes in the morainal debris show a high percentage of clay and silt.

An enclosed cross section illustrates the geological conditions at the damsite.

### Conclusion

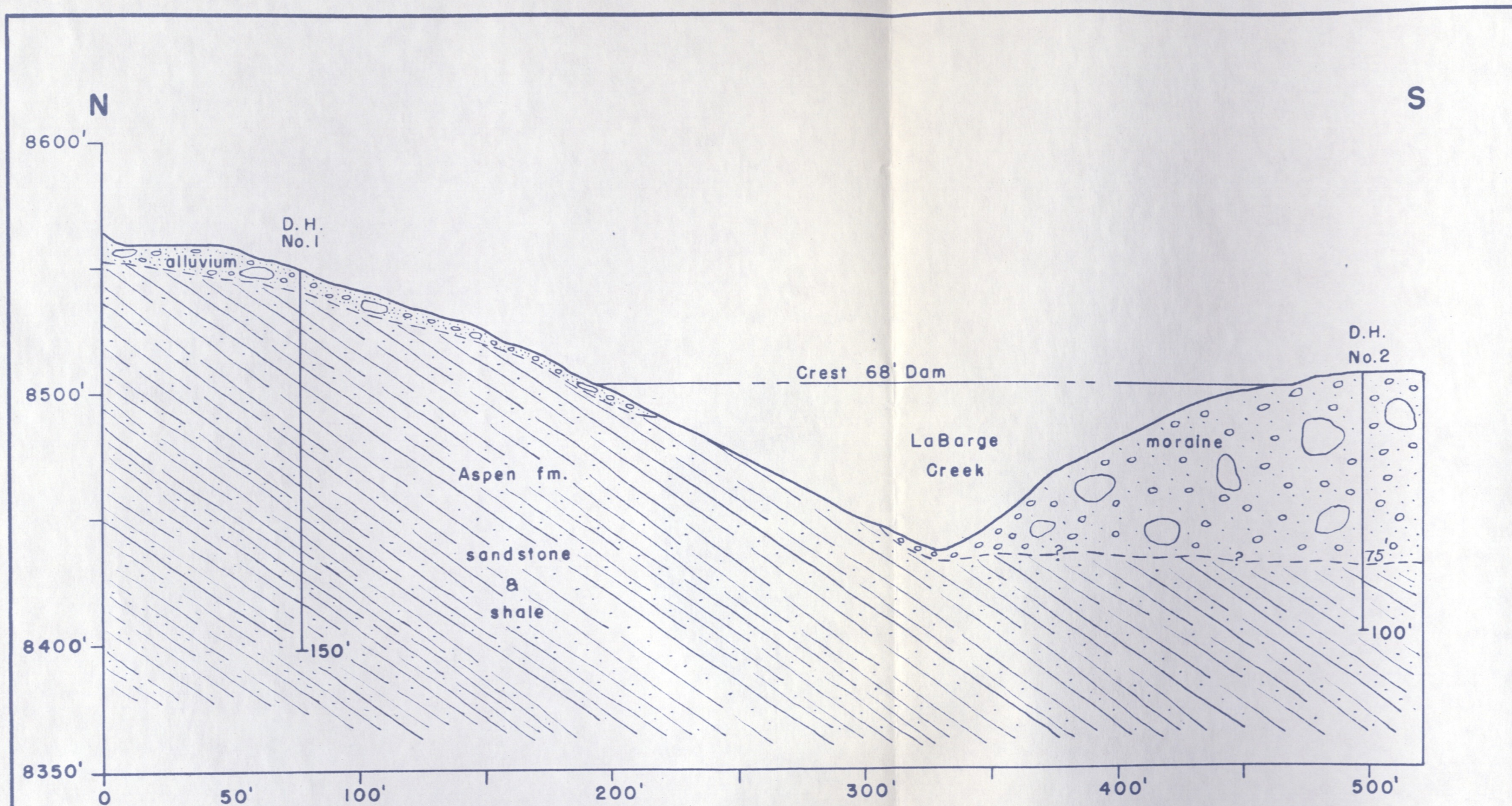
In general the shales and sandstones of the Aspen formation are adequate to support a dam without serious seepage. Water loss due to the permeability of the morainal material will probably be somewhat greater; however, the high silt and clay content will help to reduce this. Because of

the presence of morainal material on the southwest abutment, the writer recommends that only the 68 foot dam be considered.

William H. Wilson  
Ass't. State Geologist  
February 20, 1957

Reference

Murdock, J. Neil, "La Barge Dam and Reservoir Site", U. S. Bureau of Reclamation Report G-57, July 1949.



NORTH-SOUTH GEOLOGICAL CROSS SECTION  
 (looking downstream near damsite)

**LA BARGE MEADOWS  
 DAMSITE**  
 Modified after U.S. Bur. Reclama-  
 tion Report, G-57, July, 1949.