

SODA LAKE DAMSITE, SUBLETTE COUNTY

Location: Sec. 15, T. 32 N., R. 115 W.

Date Examined: May 29, 1957

Storage Data: A dam 21 feet high will impound approximately 370 acre-feet of water.

Geology

Soda Lake occupies a large kettle (depression) in hummocky morainal topography that had been formed by eastward or southeastward moving glaciers. The lake is well contained within the kettle, and evidently seepage losses are minor except perhaps in the fall when the morainal debris is not as well saturated.

The present lake will be enlarged by extending a small dam across a depression between two ridges of morainal debris. The morainal debris is composed of poorly sorted, angular to subrounded rock fragments of Mesozoic and Paleozoic age. The material seems to have a certain amount of clay and appears relatively impermeable.

Rocks of Cretaceous age, which strike approximately north-south and dip westerly, crop out on both sides of the glaciated valley occupied by South Cottonwood Creek. These formations, however, do not have any bearing on the reservoir or damsite, since both are located on morainal debris.

Conclusion

The reservoir and damsite are in a satisfactory geological location, and no difficulty should develop in the proposed project. Some seepage, however, will probably take place later in the summer, especially if the

reservoir is full at that time. This is to be expected, but should not prove excessive.

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