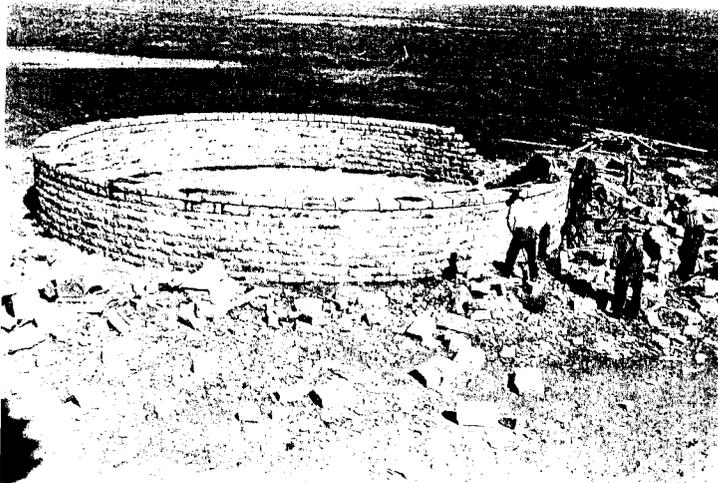
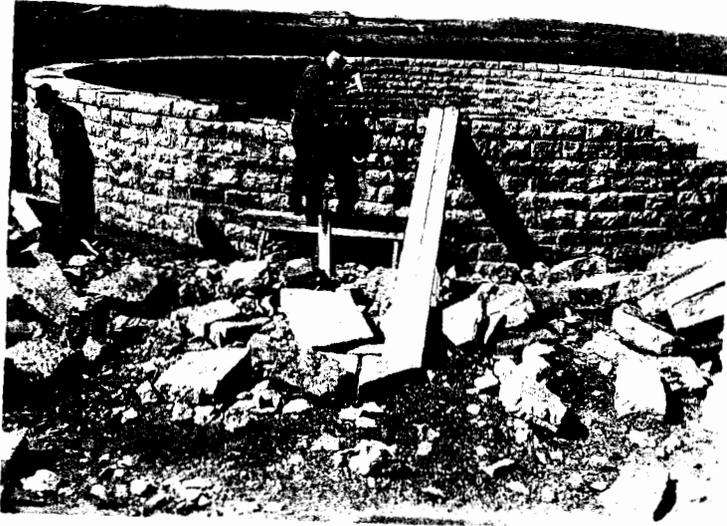




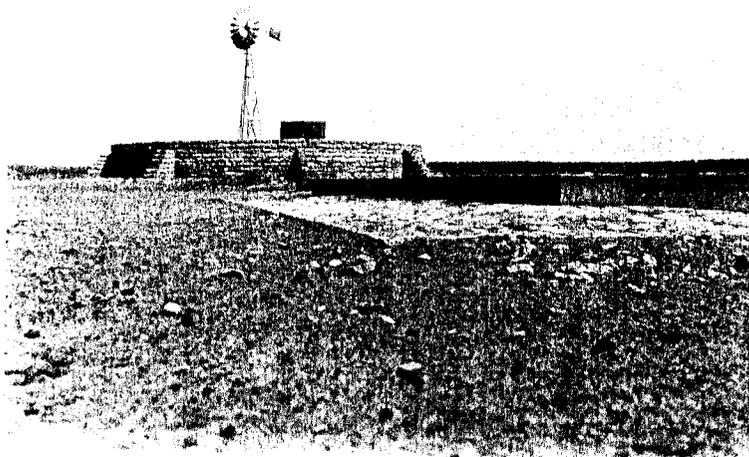
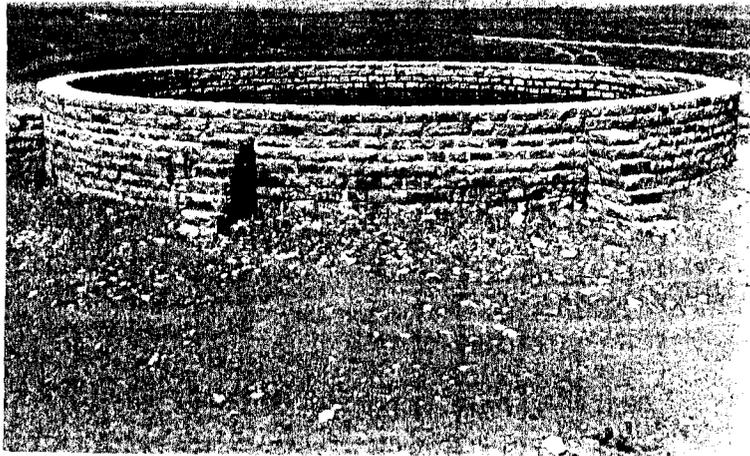
Water Supply with OCID labor building a 43,000 gallon stock water storage tank. A hard dolomite rock was used for the walls and reinforced concrete for the floor





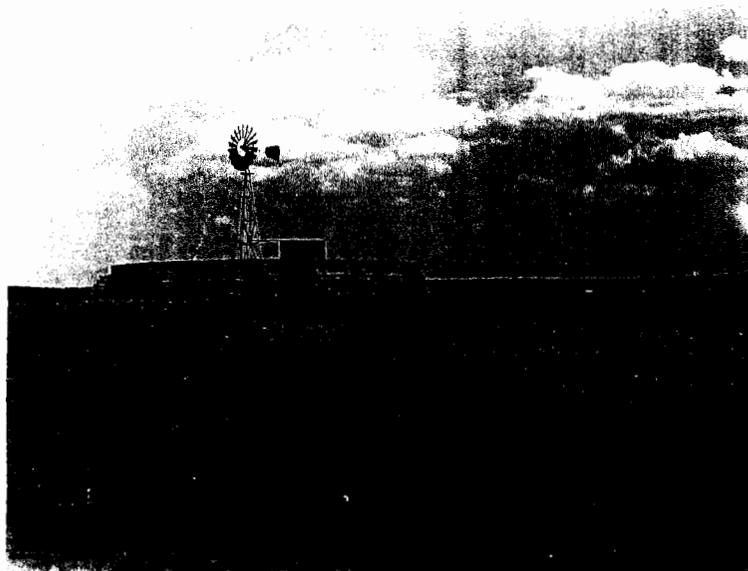
Water Supply with CCID labor building a 43,000 gallon stock water storage tank. A hard dolomite rock was used for the walls and reinforced concrete for the floor







The completed tank half full of water.



The completed project showing the concrete watering troughs with float valve box and rock apron. The project so far has proved very successful.

WATER SUPPLY OPERATION AND AMINTENANCE

The Hopi Indian Agency at Keams Canyon received an allotment of funds for constructing a new water well and distributary system. This project was turned over to Water Supply and work started at the beginning of the fiscal year.

A reinforced concrete cassion 12 feet in diameter was built and sunk beside the wash to a total depth of 47 feet. 2" perforated pipe was jacked out through ports along the bottom of the cassion in all directions to furnish an additional infiltration area. A total of 630 feet of pipe was placed in this manner. At this point the well yielded a flow of 43 gallons per minute.

A circular stone pump house was built on top of the cassion. A force main consisting of approximately 1800 feet of 4" cast iron bell and spigot pipe was laid to a point close to the powerhouse where it was tied into the water main from the storage tank. A deep well turbine pump direct-connected to an electric motor was purchased, but so far we have been unable to get delivery.

Water Supply with the C.C.C.I.D. furnishing the labor constructed a 43,000 gallon stock water storage tank at a windmill location where additional storage was needed. This tank was built of stone masonry walls and a reinforced concrete slab for the floor. This project is being watched with interest because it has never been tried in this country before. It is especially desirable because most of the materials are native and the largest per cent of the money goes directly to labor.

48 feet of concrete watering troughs with float valve box and stone apron were built as part of the project. The total cost compares favorably with the cost of steel tanks of the same capacity.

The work of maintaining and operating all domestic and stock water developments including the agency well, the day school water systems etc., was carried on along with the construction work. Major and minor repairs were made to windmills, shallow wells and springs. During July of this year due to light winds and hot weather it was necessary to install four pump-jacks with motors at key locations to furnish water.

Out of the total appropriation of \$7,500.00, a total of \$4,542.25 was paid for salaries and wages, ALL of which was paid to Indians.

Llewellyn Kingsley
Llewellyn Kingsley
Foreman, Water Development

IRRIGATION OPERATION AND MAINTENANCE

The Polacca Stock Growers Association farmed the Jeddito project this year. Wheat was planted to harvest as a hay crop to furnish supplemental feeding for the registered bulls owned by the association. A fair crop was harvested and stacked on the project. Several tons of hay harvested last year are left over. 25 new fruit trees were planted in the windbreaks and the trees previously planted are coming along in good shape. Approximately 1000 additional trees were planted on the project this spring to afford additional wind control and cover. 2 of the plots were planted to oats and a good stand resulted.

A special effort was made this spring to get the farmers on the Phillips Farm project started and the result is very satisfactory. Several of the day schools were invited to plant several vacant plots to serve the dual purpose of affording a demonstration of proper farming practises and to use the products. Beans, potatoes, melons, corn, lettuce, onions, beets and sugar cane were planted on the project and all indications point to a good yield. A number of elm trees were planted about the project and the flood protection dike was planted to a grass cover. The pumping plant has functioned with a minum of trouble and the whole works is in good operating condition. Several of the farmers have purchased through the Reimbursable plan teams of mules, harness and wagons which will be a big help and farming the project.