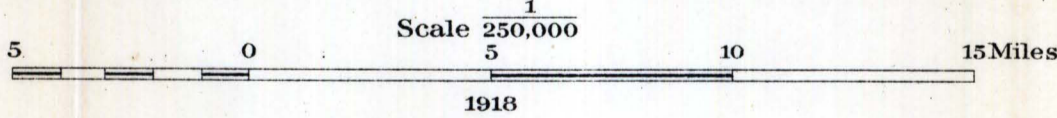


Base compiled from plane-table map by A. T. Schwennesen, General Land Office plats, railroad alignment maps, U. S. Boundary Survey maps, and Forest Service maps. Numbers in parentheses indicate altitudes in feet above sea level.

MAP OF SOUTHERN GRANT COUNTY, NEW MEXICO
SHOWING GEOLOGY OF VALLEY AREAS AND DISTRIBUTION OF ALKALI

Geology by A. T. Schwennesen



LEGEND

FORMATIONS		TOPOGRAPHIC FEATURES	SOLUBLE SOLIDS (ALKALI) IN UPPER 4 FEET OF SOIL (Per cent of total soil)
QUATERNARY	Recent		Total alkali
	Qws	Wind-deposited sands	◇ Less than .20
	Qbc	Playa deposits of clay with soluble salts precipitated from evaporating waters	◇ .20 to .40
	Qys	Younger stream deposits of clay, sand, and gravel	◇ .40 to .60
	Qi	Lake and stream deposits of clay, silt, and sand, with minor quantities of gravel	◇ .60 to 1.00
	Qbd	Beach deposits of sand and gravel	◇ More than 1.00
Pleistocene	Qb	Basalt	Black alkali (Sodium carbonate and bicarbonates)
	Qos	Older stream deposits of poorly assorted sand and gravel, with minor quantities of clay and silt	□ Less than .05
	und	Undifferentiated rocks (sandstone, shale, limestone, quartzite, marble, granite, porphyritic lavas, tuff, and breccia), including a few areas covered by Quaternary basalt	□ .05 to .10
PRE-QUATERNARY			□ .10 to .20
			□ .20 to .30
		■ More than .30 Approximate boundaries of areas within which the soil is generally strongly alkaline, including that upon which the more resistant crops can be grown if special precautions are taken to prevent a further concentration of alkali and that from which it is necessary to remove part of the alkali before any crops can be grown
		49	49 Numbers of soil samples correspond to numbers used in tables and text