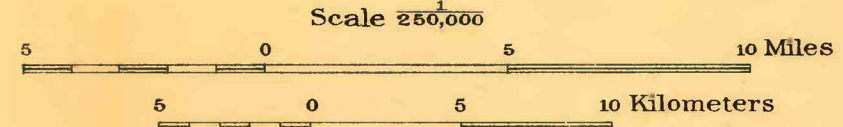


# MAP OF SULPHUR SPRING VALLEY ARIZONA

SHOWING GEOLOGY AND VEGETATION



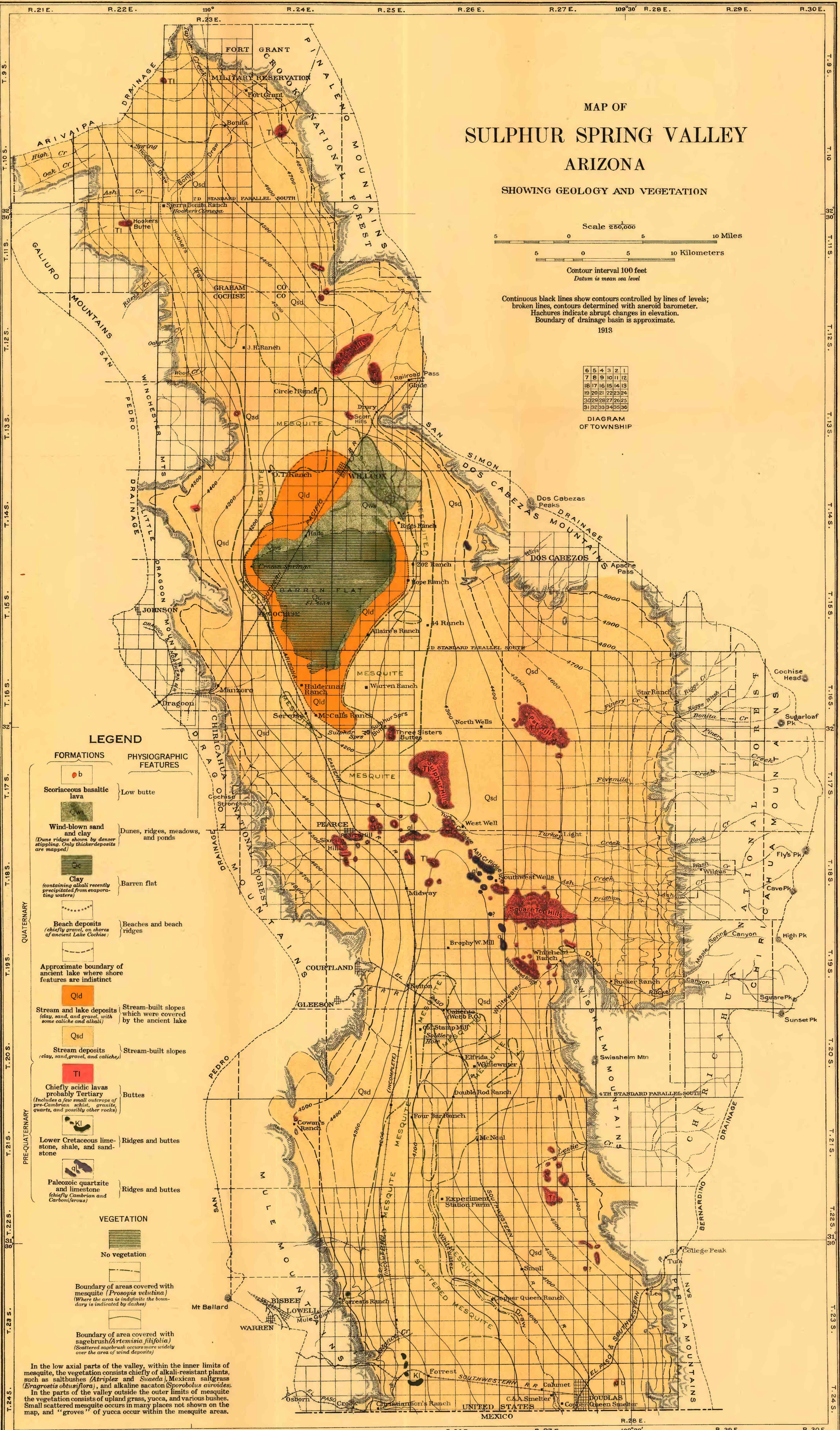
Continuous black lines show contours controlled by lines of levels;  
 broken lines, contours determined with aneroid barometer.  
 Hachures indicate abrupt changes in elevation.  
 Boundary of drainage basin is approximate.  
 1913



## LEGEND

- | FORMATIONS   | PHYSIOGRAPHIC FEATURES                                     |
|--|--|
| Scoriaceous basaltic lava  | Low butte  |
| Wind-blown sand and clay<br><small>(Dune ridges shown by denser stippling. Only thicker deposits are mapped.)</small>  | Dunes, ridges, meadows, and ponds                          |
| Clay<br><small>(containing alkali recently precipitated from evaporating waters)</small>   | Barren flat  |
| Beach deposits<br><small>(chiefly gravel, on shores of ancient Lake Cochise)</small>   | Beaches and beach ridges                                   |
| Approximate boundary of ancient lake where shore features are indistinct   |  |
| Stream and lake deposits<br><small>(clay, sand, and gravel, with some calcite and alkali)</small>  | Stream-built slopes which were covered by the ancient lake |
| Stream deposits<br><small>(clay, sand, gravel, and calcite)</small>  | Stream-built slopes  |
| Chieffy acidic lavas probably Tertiary<br><small>(includes a few small outcrops of pre-Cambrian schist, granite, quartz, and possibly other rocks)</small>       | Buttes   |
| Lower Cretaceous limestone, shale, and sandstone   | Ridges and buttes  |
| Paleozoic quartzite and limestone<br><small>(chiefly Cambrian and Carboniferous)</small>   | Ridges and buttes  |
| VEGETATION   |  |
| No vegetation  |  |
| Boundary of areas covered with mesquite ( <i>Prosopis velutina</i> )<br><small>(Where the area is indefinite the boundary is indicated by dashes)</small>        |  |
| Boundary of area covered with sagebrush ( <i>Artemisia filifolia</i> )<br><small>(Scattered sagebrush occurs more widely over the area of wind deposits)</small> |  |

In the low axial parts of the valley, within the inner limits of mesquite, the vegetation consists chiefly of alkali-resistant plants, such as saltbushes (*Atriplex* and *Suaeda*), Mexican saltgrass (*Eragrostis obtusiflora*), and alkaline sacaton (*Sporobolus airoides*). In the parts of the valley outside the outer limits of mesquite the vegetation consists of upland grass, yucca, and various bushes. Small scattered mesquite occurs in many places not shown on the map, and "groves" of yucca occur within the mesquite areas.



Base compiled from maps by O. E. Meinzer and F. C. Kelton, General Land Office township plats, railroad alignments, and Forest Service maps. Instrumental leveling by F. C. Kelton.