

The southwestern part of this tp.; comprising secs. 19, 30, 31 and the major portion of secs. 20, 29, 32 and 33; and the southern portion of sec. 34, is a level or somewhat undulating mesa, with a slight slope to the north and northeast. It has apparently been formed by a lava flow and the mesa is now cut off on the N.E. side by Rock creek, which has cut a gorge about 800 ft. deep below the level of the mesa. The soil on this mesa land has been formed by the disintegration of the lava, and is a fine texture loam, from a few ins. to several feet in depth. This fine texture soil is underlaid with a more clay like subsoil, and this subsoil is underlaid with the lava rock which forms the basis of the mesa. There is no springs or streams on this portion of the mesa and it does not seem probable that any water would be found at any reasonable depth in wells. There is a good growth of sagebrush, but not much grass or other herbage, on this mesa.

Rock creek comes from the north, and entering the tp. in the N.E. $\frac{1}{2}$ sec. of sec. 5; flows in a southerly direction through secs. 5, 8, 17, 21 and 28; thence turning in an easterly direction in the N.E. $\frac{1}{2}$ sec. of sec. 33 flows somewhat south of east through secs. 34, 35 and 36 and leaves the tp. near the S.E. cor. of the tp.

Through secs. 5, 8, 17 and ²¹, there is a strip of level bottom land, varying from 60 chs. in width on the N. bdy. of sec. 5 to where it runs to a point in the N.W. $\frac{1}{4}$ sec. of sec. 28. This land is good soil, of a fine texture and from 4 to 6 ft. in depth, is quite level and has about the right slope to irrigate easily. If it could be irrigated it would produce abundantly of those crops suited to the climate, hay and grain probably would do better than crops which require a longer growing season. The water of Rock creek is all claimed by persons with prior water rights along its upper courses and in the valley of the Humboldt river so it is not apparent where water to irrigate this land could be obtained.