

Oregon and Washington Boundary Line.

Chains

edral Reck^m, about 400 feet high and almost perpendicular, with a steep stone slide; near road to Wallula distant about 6 miles, also 1/3 mile S.S.W. of mouth of big canyon, coursing East.

May 20th

The position of this station is dependent upon the results of 352 observations for Latitude, 107 Altitudes for Time, 67 measurements of Sun's semi-diameter for instrumental corrections and 26 readings for Refraction and Elevation above sea level.

Magnetic Declination 20°20' E. The compass needle was rather sluggish and non-sensitive and although this determination does not merit full confidence, it is correct for all practical purposes.

May 23rd

Final result for Latitude of this station 46°00'33.6". The Bdy. would therefore be S.33.6 seconds, equal to 51.5 chains, which distance was measured and temporarily marked as the 46th parallel, according to the observations at station Second.

The difference between the two determinations of the 46th parallel as resulting from the Cottonwood Series, Sta. 1st (prolonged to Columbia River) and the Columbia River series, Sta. 2nd, was four seconds. Combining both series, the most probable determination is obtained by equations of condition.

The Initial point of the Bdy. being thus determined, is dependent upon the results of 580 observations for Latitude and over 250 Altitudes for Time, all necessary measurements and examinations being made to correct instrumental errors and personal equations. The objects were so selected that, any imperfection in measurement or unknown error in instrument, if not entirely eliminated would produce at most a minimum effect.