



November 16, 2015

Mr. Martin Gibbs
The Edward R. Murrow College of Communications
Washington State University
P.O. Box 641025
Pullman, WA 99164-1025

RE: Pikes Peak Television Antenna – Facility ID: 71044 - Call Sign KWWS

Mr. Gibbs,

This letter is to certify that the broadcast antenna for KWWS was oriented to 290 degrees on November 16, 2015.

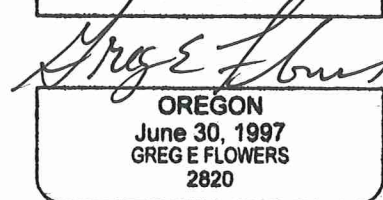
The geodetic (True North) azimuth was determined by field measurements using a Trimble S6 Robotic Total using direct reflex (DR) mode having standard errors of 00°00'05" angular and 2 mm + 2 ppm (0.0065 ft. + 2 ppm) distance in DR mode. The measurements were taken from control points established using Trimble R6 and R8 dual frequency GNSS receivers constrained to NGS COR stations P422 FOOT_HILL_ ID2007 PID DL7746, P020 DRYLNDRSH_WA2004 PID DG7408 and ENTERPRISEOR2007 PID DL7743.

Please feel free to contact me at (509) 682-4189 with any questions or comments that you may have.

Respectfully,
HDJ Design Group PLLC

A handwritten signature in black ink, appearing to read "Greg E. Flowers".

Greg E. Flowers PLS
Survey Manager



11/16/2015