## Bonneville Power Administration Geodetic Control Data Sheet

Station: WM021C (255) Project: Wallula-Smiths Harbor-McNary Section: Township: 7 North SW 1/4 25 Range: 31 East Meridian: Willamette County: Walla Walla State: WA **USGS Quad:** Wallula, Washington Date Surveyed: July, 2001 Surveyor: M R Heidecke

## Instrument:

The horizontal coordinates and orthometric elevation were established by GPS observations using six Trimble 4000 SSI dual frequency receivers with Compact L1/L2 antennae with ground plane.

## Adjustment:

The Basis of Coordinates for this survey is the Washington State Coordinate System, South Zone, NAD 83 (1998). The horizontal component of the least squares adjustment was constrained by holding NGS Stations B 340 (A), B 502 (B), PENDLETON (B), STANFIELD EAST BASE RESET (B), and BURDEN (B). The vertical component of the least squares adjustment was constrained by holding NGS Benchmarks B 340 (First Order Class II), B 502 (First Order Class II), BURDEN (Second Order Class II), V 203 (Second Order Class 0), G 640 (First Order Class I). The elevation for point 106, 201, 249, and 255 were determined by differential leveling from G 640, D 502, E 525 and F 431 respectively and held.

Horizontal Datum:	NAD83 (1998)	Linear Unit:	U.S. Survey Feet
Vertical Datum:	_NAVD88	Linear Unit:	U.S. Survey Feet

Latitude: N 46-03-10.99893 Lo	Longitude: W 118-52-46.62770			
US State Plane Coordinate System:	Washington South Zone - 4602			
Northing: 266,682.463 Ea	sting 2,051,786.878			
Orthometric Elevation: 444.47	Ellipsoid Height: 373.87			
Combined Factor: 0.99993959	Convergence: - 1-10-37			
Confidence: 95% Confidence ("1.96 Sigma") Values				
Northing-0.011 Ea	esting-0.0111 Elevation-0.000			

Monumentation: BPA 31/4-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground. Stamping: U.S.D.O.E. Bonneville Pwr. Adm., WM021C - FEC-01 - ATB - GPS

## To-Reach Description:

Begin on Washington State Highway #12 at the Washington State Truck Weigh Station at Wallula Junction. Drive east on Washington State Highway #12, 1.45 mile to the station. The station is 49 feet north of the centerline of Washington State Highway #12, also 23 feet west of U.S.C.&G.S. Bench Mark F-431.

Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

Umatilla County Surveyor

Date

Rec'd By