Bonneville Power Administration Geodetic Control Data Sheet

Station:	WM004 (204)					
Project:	Wallula-Smiths Harbor-McNary					
Section:	NE 1/4 34	Township: 8 North	Range:	31 East	Meridian:	Willamette
County:	Walla Walla	State: WA	USGS Quad:	Humorist, W		_ · · · · · · · · · · · · · · · · · · ·
Surveyor:	M R Heidecke		Date Surveyed:	'		

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

	46-08-00.00726	Longitude: W 118-55-09.20156					
US State Plane Coordinate System:			Washington South Zone - 4602				
Northing: 29		Easting	2,041,147.255				
Orthometric Ele	evation: 422.49		Ellipsoid Height:	351.52			
Combined Fact	or: 0.99992873	•	Convergence: -				
Confidence: 95% Confidence ("1.96 Sigma") Values							
		Easting-0.0		Elevation-0.105			

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., WM004 - FEC-01 - ATB - GPS

To-Reach Description:

Begin at Wallula Post Office at Wallula, Wa. 99363. Drive north on Columbia Way (County Road #1870) 0.2 miles to intersection of Columbia Way and Washington State Highway #12. Drive north on Washington State Highway #12, 3.8 miles to intersection of Highway #12 and Dodd-lowa Beef Road. Turn right and drive east on Dodd-lowa Beef Road 0.7 miles to intersection with the Union Pacific Railroad crossing (north-south). Drive south on Union Pacific Railroad right-of-way access road, running on east side of tracks, 0.3 miles . Station is on hummock, on railroad right-of-way, 51 feet east of centerline of railroad tracks.

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

